

# PRINCIPLES OF CIVIL GOVERNMENT

(PART II)



# PRINCIPLES OF CIVIL GOVERNMENT

## PART I

AN INTRODUCTION TO THE SCIENCE OF POLITICS

BY

—

A. K. GHOSE, BAR-AT-LAW

PRINCIPLES  
OF  
CIVIL GOVERNMENT

PART TWO

AN INTRODCUTION TO THE SCIENCE OF ECONOMICS

BY

SACHIN SEN, M.A., B.L.

*Author of the "Political Philosophy of Rabindranath".*

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## PREFACE

I feel an apology is needed for coming out with a book which treats the whole subject-matter of economics in a single volume. There are good many in the field and they say there is no room for a new one. But I have my own pleas in extenuation. In my college days, I felt that there were standard works in Economics which were either voluminous or difficult for the undergraduate students of the Indian Universities. Moreover, the principles are enunciated and explained in all the standard works with reference to conditions which are foreign and necessarily make no appeal to us. I claim that I have enunciated and examined the principles, briefly and lucidly, with due reference to the conditions of India, and that I have presented the subject-matter in a way which is likely to fascinate the Indian readers. There is not a single treatise in the field which can boast of similar ideals and that is the justification for adding another to the large number of books that attempt to deal with the same subject. I do not know if or how far I have succeeded; the verdict must come from those for whom it is meant.

I should, however, be untrue to myself if I do conceal my immediate incentive to undertaking the work; that was a request from my friend Mr. A. K. Ghose, the author of the first part. "Civics" is now taught in nearly all the Universities of India and it is a growing popular subject. There is no single comprehensive work which meets the requirements of students. The subject is also an instrument of mental culture—a subject with which every present day Indian should be thoroughly acquainted. These were the wants which were strongly felt by Mr. Ghose and it was at his request that I undertook the writing of the portion of economics, the political portion being taken up by himself.

I wish to acknowledge my debt to previous writers. The works of Marshall, Taussig, Chapman, Clay, Seligman, to mention only a few, have been utilised in full. I do not pretend that I have my own contributions to the science, but this much I may say that I have introduced many refreshing and thought-provoking viewpoints in the discussions of various subjects—a feature which has certainly added to the merit of the book inasmuch as it will stimulate the brain-power and thought-waves of the readers.

My gratitude to various thinkers and writers of the age will be apparent throughout the book, but I must be failing in my courtesy if I do not mention the names of my cousin, Mr. Hemendra Nath Sen, a post-graduate scholar, who acquainted me with the needs and requirements of students, and of my nephew, Mr. Bhupati Sen, who took the trouble of preparing the Index for me.

*Sachin Sen*



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“Economics, which is neither more nor less than the academic name for the science of work and wealth, is spoken of in the ‘Science of Life’ as a branch of ecology ; it is the ecology of the human species . . . . Economics is the science of the balance of human life and how it prospers or decays . . . . Until recently economic science and discussion have ignored biology and outraged psychology ; they have dealt with a sort of standard and inalterable man ; it is only now that it becomes possible to bring economic realities into line with these more fundamental sciences and treat them as evolved and evolving facts.”—MR. H. G. WELLS in *The Work, Wealth and Happiness of Mankind*.

# PRINCIPLES OF CIVIL GOVERNMENT

## CHAPTER I

### Introduction

Ordinarily people go about with the impression that Political Economics—what it is. Economy or Economics concerns itself with the selfish pursuit of wealth by individuals and that, in it, is to be found a useful compendium of the essential rules for money making. The enthusiastic young learner should however be told, possibly to his disappointment, that Economics does not pretend to furnish the imagined short cut to increasing the young readers' bank balance and that all that it claims to be is a methodical and scientific study of man in the ordinary business of life. When we speak of man's ordinary business, the principal emphasis is laid on that side of human activities which are directed to the attainment of the material requisites of well-being, and the acquisition, with that purpose, of what is ordinarily meant by wealth. This does not mean that Economics is a science of wealth-getting ; it is not so. It is a systematic study of those social phenomena which arise out of man's efforts at wealth-getting and wealth-using.

It is not suggested that man, as the subject matter of Economics, It deals with man as he is. need be or is different from what he is in ordinary life. Economics regards man as he really is in actual life—with all his excellences and defects and with the best and worst of his motives. It does not assume that man will always be guided by the grossest self-interest. This enlightened view of the character of the science has led the Economists to define Economics as a science not of wealth but of man in relation to wealth.

Economics has been described as a science. It should be realised It is mainly a science. at this stage that Economics is not a collection of monetary precepts. It attempts on the contrary, like other sciences, to bring ordinary human actions and the motives of men, which usually underlie the ordinary business of human life, within the compass of laws. It mainly proceeds, on the basis of certain assumptions, to study the effects produced by certain courses of human action or certain changes in the social phenomena, and aspires, by way of a rough approximation, to reach certain conclusions which are intended to be universal and general. Thus, in Economics, we shall find it stated, for instance, that the effect of a rise in the price of a commodity will be, other things

being equal, a lessening of the demand for it ; or that an increase in the quantity of money in circulation in a particular country will tend to raise, other things remaining unchanged, the general price level in that country. It will thus be seen, here we find the assumption of certain conditions (as is implied in the phrase, 'other things being equal'), a discussion of the effect produced by certain phenomena, e.g. a rise in price of a certain commodity or an increase in the quantity of money in circulation and the final emergence of a body of general and universal conclusions.

It should be noted that Economics has not yet reached the stage of exactness and precision as attained by the physical sciences—not so exact as the physical sciences ; and this comparative inexactitude and lack of precision is an incident of the very nature of the subject matter of Economics. It is not possible for an Economist to copy the manners of the physical scientist and to make laboratory experiments of the effects produced on and by human motives—because, after all, it is with human motives that Economics attempts mainly to deal. The only instrument, it will be noted, which helps the Economist to come to generalisations, is the fact that these human motives admit approximately of an indirect measurement in money. Thus, when a person is prepared to spend more on a cinema show than on a football match, we may fairly conclude that he derives greater satisfaction from a cinema show than from witnessing a football match ; or say, when we find a person in doubt whether to spend a certain sum of money on one thing or another, the conclusion is legitimate that the satisfaction he expects to derive from either is equal. Thus we see that almost all that the Economist can do, in this connection, is to study and compare human motives not directly, but through indirect manifestations, as in the shape of money-sums which an individual may be prepared to lay out, in pursuit of the motive or motives in question.

One other point as to the nature of the science of Economics.

Economics—  
more a method  
than a body of  
concrete truths.

We have said before that it is a systematic and methodical study of certain social phenomena and that it attempts at formulating a body of universal conclusions and laws, which can be invoked for

the purpose of explaining that aspect of human actions which are directed to the furthering of the material interests of man. The universal conclusions and laws referred to above, are not to be taken as immutable truths, capable of guiding our policy, irrespective of circumstances. The laws referred to are at best hypothetical in character, claiming to hold good only as long as the basis of the assumptions made stands, and liable to be modified by every deviation from those basic assumptions. A rise in price of a commodity may not result

in a lessening of the demand for it, if, for instance, the rise in price has followed the discovery of new uses of the commodity. Here the apparent invalidity of the law, as explained in the third paragraph above, is no real invalidity, but is due only to a breach of the assumptions comprised in the phrase 'other things being equal'—assumptions on the basis of which the validity of the law holds good. It is suggested, therefore, that Economics should not be taken to embody and furnish a mass of settled conclusions immediately applicable to policy but should rather be taken to be a method and a mental apparatus, which, when used in the judging of actual circumstances, helps in the drawing of correct conclusions.

Thus the study of economics is an instrument of mental culture.

**An instrument of mental culture.** It is necessary for businessmen, useful for labourers and helpful for solution of social problems. Man obtains guidance in the practical conduct of life, because it is a study of the economic aspects and conditions of man's political, social and private life. The need for such guidance, according to Prof. Marshall, was never so urgent as now; a later generation may have more abundant leisure than we for researches that throw light on obscure points in abstract speculation, or in the history of past time, but do not afford immediate aid in present difficulties.

**Limits of Economics.** Economics is not a complete philosophy of society; so its relation to other sciences is to be carefully studied to appreciate its limits. The advantage which economics has over other branches of social science appears, then, to arise from the fact that its special field of work gives rather larger opportunities for exact methods than any other branch. "It concerns itself chiefly with those desires, aspirations and other affections of human nature, the outward manifestations of which appear as incentives to action in such a form that the force or quantity of the incentives can be estimated and measured with some approach to accuracy; and which therefore are in some degree amenable to treatment by scientific machinery."

**A branch of Sociology.** Economics is a branch of Sociology. The data of Sociology may be described as all social facts and the data of Economics as all those social facts which have reference to wealth. Economics is also related to Political Science as there are actions which refer to wealth and government at the same time. Thus, production and distribution of wealth, which clearly fall within the scope of Economics, are also influenced by the State, and, as such, come within the purview of Political Science. Economic conditions and institutions often react on political conditions and institutions. Thus Economics and Politics overlap to a great extent.

Scope of Economics

But there are some who hold with Comte that the science of Economics must not be narrowed down ; it must be co-extensive with the whole of social science. Man must be considered as a whole and his actions and motives, affections and affectations cannot be divided into watertight compartments. Therefore, the economists must give up their distinctive role. Prof. Marshall acknowledges the force of these contentions. But he simply complains, rightly, that, by widening the scope, Economics will lose precision and definiteness. "The whole range of man's actions in society is too wide and too various to be analysed and explained by a single intellectual effort. . . . But, if, when straying far into less known and less knowable regions of social study, he does his work carefully and with a full consciousness of its limitations, he will have done excellent service." So he says :—"A person is not likely to be a good economist who is nothing else. Social phenomena acting and reacting on one another, they cannot rightly be understood apart ; but this by no means proves that the material and industrial phenomena of society are not themselves susceptible to useful generalisations but only that these generalisations must necessarily be relative to a given form of civilisation and a given stage of social advancement."

Economic principles and Indian conditions.

The applicability of the general principles of Economics to the Indian conditions has its difficulty, not because those conditions do not admit of economic analysis. Moreover, Indian psychology and Indian social conditions are peculiar and require to be examined very delicately. Mr. Ranade incisively points it out with an element of exaggeration, born of literary flourish :—"With us an average individual man is, to a large extent, the very antipode of the economical man. The Family and the Caste are more powerful than the individual in determining his position in life. Self-interest in the shape of desire of wealth is not absent, but it is not the only principal motor. The pursuit of wealth is not the only ideal aimed at. There is neither the desire nor the aptitude for free and unlimited competition except within certain predetermined grooves or groups. Custom and State regulation are far more powerful than Competition, and Status more decisive than Contract. Neither Capital nor Labour is mobile, and enterprising and intelligent enough to shift from place to place. Wages and profits are fixed; and not elastic and responsive to change of circumstances. Population follows its own law, being cut down by disease and famine, while production is almost stationary, the bumper harvest of one year being needed to provide against the uncertainties of alternate bad seasons. In a society so constituted, the tendencies assumed as axiomatic are not only inoper-

## INTRODUCTION

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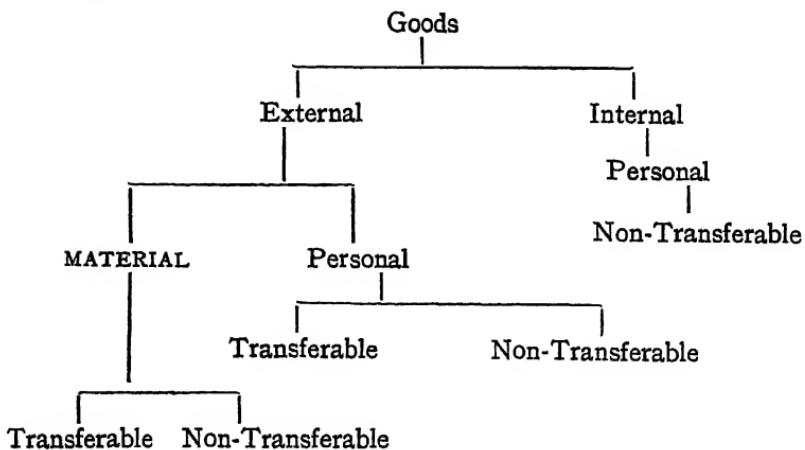
ative, but are actually deflected from their proper direction. You might as well talk of the tendency of mountains to be washed away into the sea, or of the valleys to fill up, or of the sun to get cold, as reasons for our practical conduct within a reasonable distance of time."

## CHAPTER II

### Some Fundamental Notions in Economics

We have seen that Economics is the study of human actions in relation to wealth, and, before we proceed further with the subject, we should be clear about what "wealth" means. Economists use their terms in the way they are commonly used; but common words, it has been seen, are often found to possess different shades of meaning. It is only with a view to be accurate and clear that those terms are to be defined. In Economics, the value of definition is immense; its importance is keenly felt in cases where the economists are to develop any discussion logically. For any systematic study of that branch of science to which Economics belongs, the importance of seeking for the best definition of each cardinal term cannot be overrated.

"Wealth", taken in its widest significance, is synonymous with Goods. Then what are 'goods'? Things which satisfy human wants are 'goods'. Air and water, cigar and book, love of parents and friends—each of these is 'goods' as it tends to the satisfaction of a human want. Goods may be classified as follows:—



Material goods are water, air, etc. Personal goods are either internal to a man, e. g. professional skill, or external to him, e. g. goodwill of his business.

Goods may be either transferable, e. g. agricultural products, or non-transferable, e. g. climate.

Thus broadly speaking 'wealth' is 'goods'. In the accepted sense Wealth. wealth consists only of those things that satisfy human wants and are limited in quantity, whether they

are results of human efforts or are free gifts of nature. Here the essential idea is utility plus limitation of quantity.

Care should be taken, however, to distinguish between wealth of an individual and national wealth.

**Individual wealth and national wealth.** A man's wealth, in general terms, is taken to consist of two classes of goods :

(i) Those material goods to which he has private rights of property and which are therefore transferable and exchangeable, e. g. land, buildings, etc.

(ii) Those immaterial goods which are external to him and which help him to acquire material goods, e. g. the goodwill of his business.

Immaterial goods which are internal, e. g. a man's personal qualities, are excluded when calculating the wealth of an individual.

In calculating national wealth, however, we have to take account of the following elements :

(1) National wealth includes the sum of the wealth of all individuals who are members of the nation (Debts from one member to another are to be omitted).

(2) National wealth includes public material property of all kinds, e. g. public buildings, public parks, etc.

(3) In estimating the wealth of a nation, we must include free goods (specially when we compare it to the wealth of other nations)—thus the Ganges by reason of facilitating transport, etc. is part of the national wealth of India.

(4) German Economists seem inclined to include the non-material elements in national wealth. Thus, according to this view, the organisation of a free and well ordered State is regarded as an important non-material element of national wealth.

Wealth from a different standpoint may be said to consist of :—

(1) Consumption goods, which we consume directly, e.g. clothes, food, etc.

(2) Production goods, which we cannot consume directly but which help to produce the goods that we can enjoy; e.g. machinery for the manufacture of cotton cloth.

The line of demarcation between consumption and production goods cannot be sharply drawn; the same thing may be a consumption goods from one point of view and a production goods from another point of view. Suppose an employer has a stock of clothes and food for his labourers: the clothes and food will be consumption goods for the labourers but they will be production goods from the point of view of the employer.

*Production goods* are again divided into—

(i) Land—the materials and forces supplied by nature—which is free gift of nature to society.

(ii) Capital goods—which are produced by man and which represent an intermediate stage in production; e.g. machinery, factory, raw materials.

Income has been defined “as the wealth measured in money, which is at the disposal of an individual or community per year or other limit of time,” the income of the individual being individual income and the income of the nation being national income.

The labour and capital of the country, acting on its natural resources, produce annually a certain net aggregate of commodities, material and immaterial, including services of all kinds. This is the true national income and national dividend.

The term ‘capital’ can be conveniently discussed in connection with income. Capital is correlative to income. Capital is that part of wealth which is expected to yield an income, on account of the help given by capital as regards the work of production. As has been pointed out above, capital is an agent in production though it is not an original element.

Capital may be regarded from the social and from the individual point of view.

Social capital, broadly regarded, has been divided into—

(1) Auxiliary Capital which covers every thing auxiliary to consumers' capital.

(2) Consumers' capital, on which consumers live while producing.

Thus machine, capital, are auxiliary capital, while houses, clothes and food are consumers' capital.

It has also been divided into—

(1) Fixed capital—which serves a purpose continuously, like machine.

(2) Circulating capital—which serves its end but once, like leather, which when made into boots is no longer material for making leather goods.

Private Capital is capital regarded from the individual point of view. Upon its nature we need not dwell at any length. An individual's wealth consists in his possession of goods or share in their possession, and in his claims to goods represented, for instance, by money. The goods of which he owns the whole or the part comprise:—

(1) Personal goods.

(2) Non-personal goods used, or intended to be used, instrumentally, which must be capital to him as well as to society.

(3) Non-personal goods used, or intended to be used, as consumers' goods (*a*) by himself or (*b*) by others on payment of a consideration to him.

The student will do well to realise the distinction between these Gross income and net income. two terms to which we may have occasion to refer later on.

When a man is engaged in business, he has to incur expenditure for paying wages to the labourers, for buying raw materials and for other things. The net income of the man is found by deducting from his gross income, the expenditure necessary to produce that gross income.

A person's money income consists of that part of his income Money income and total income. which comes to him in the form of money. A person's total income includes his money income and also other forms of income; e.g., if an Indian labourer repairs his own thatched hut, he is in that way adding to his own total income, though not to his money income.

We would conclude this chapter by considering a separate Necessaries, comforts and luxuries. classification of those goods which are collectively termed 'wealth'. Wealth is classified into necessities, comforts and luxuries.

Necessaries again have been divided into—

(1) Necessaries of life, by which are meant those things which are physiologically necessary to maintain existence.

(2) Necessaries of efficiency which denote those things, over and above the necessities of life, the consumption of which contributes to the efficiency of human beings to an extent greater in value than the cost of the things consumed.

Comforts are taken to mean those things which add considerably to a person's efficiency but to an extent less in value than the cost of the things consumed.

Luxuries mean those things which when consumed do not in any appreciable degree add to, and may even detract from, a person's efficiency.

This classification, the reader should note, is somewhat subjective and relative. A thing which is a comfort to one person, may be a necessary of efficiency to another and luxury to a third and again, a thing which is a comfort to me at one time may be a luxury to me at another time.

## CHAPTER III

### Consumption

The economics of consumption comprehends human wants and their direct satisfaction. In satisfying our wants, we consume wealth. A man desires for a coat ; if he uses it, it means he consumes it. By consumption, we mean here that he consumes utilities. The importance of the economics of consumption is great. We produce wealth because we want to consume it. The virtue of wealth lies in its consumption. Therefore, consumption is the final goal of economic activity. So Prof. Jevons points out that the whole theory of Economics depends upon a correct theory of consumption.

The question is—what is a demand. “Demands are the quantitative expressions of preferences”. Suppose you

What is a Demand ?

have a preference for a thing, that is when you want a thing and you offer something to get what you want, the expression of that want in terms of exchange is Demand. Human wants are unlimited in number and the modern civilisation increases demands *ad infinitum*. The philosophy of ancient India shows that a healthy and saintly mind should put a curb on wants and restrict them as far as possible ; the philosophy of modern civilisation shows a different outlook, and, as we progress, our wants grow. To follow it logically, we get at the truth that there is no such thing as satiability of demand. A particular want may be satisfied but it is very difficult to conceive of a state when one has no demand.

The characteristics of demands are that all people demand things in groups. A student demands for books, magazines, pens, papers and so on. There are demands which are complementary. When you require a motor car, you require petrol. There are demands which are competitive or stand in a substitutional relation. You may go to a theatre or to a bioscope.

There are different laws connected with the economics of consumption. The most important is the law of diminishing utility. What is utility ? Wealth is the substance of which utility is the attribute. Utility is the power to satisfy human wants. The more we have of a thing, the less we want of that thing. Suppose you require one pound of tea every month. This pound meets your urgent need. If two pounds of tea are supplied, the utility of the second pound is less than that of the first. If three pounds of tea are supplied, the utility of the third pound is even less than that of the second. That is, the marginal utility diminishes or to put it in another way, if the amount of a thing con-

Law of Diminishing utility.

sumed increases, the utility also increases at a diminishing rate. Prof. Marshall states the law clearly as follows : "The additional benefit which a person derives from a given increase of his stock of anything diminishes with the growth of the stock that he already has."

A clear understanding of the law of diminishing utility leads us to explain two other terms—total utility and marginal utility. The student should try very carefully to grasp the true significance of these two terms, because a clear understanding of them is, at this stage, essential, before any further progress in the subject is made by the student.

**Total utility and marginal utility.** The total utility of a given quantity of any commodity means the whole of the utility or satisfaction obtained by the person consuming it, whereas marginal utility means the addition made to the total utility by the addition of the last increment consumed.

To make the conceptions clear, we shall refer to units of utility—to show the relation between satisfactions in a quantitative manner. The relationship may be a fiction but it may help us in making the conceptions clear.

Now suppose a person purchases one lb. of tea—clearly he obtains a certain amount of satisfaction from this lb., otherwise he would not have spent his money. Suppose the satisfaction which he expects to derive from it is measured by 100 units. But if we suppose that instead of purchasing 1 lb. he purchases 2 lbs., evidently the total satisfaction that he derives from the 2 lbs. though greater than 100 units, is not increased in the proportion of the satisfaction derived from the first lb. This follows from our discussion of the Law of Diminishing Utility, according to which, the total satisfaction from the 2 lbs. increases at a diminishing rate. We may legitimately suppose therefore that the total satisfaction derived from 2 lbs. is measured by, say, 180 units. Here though the total utility (or satisfaction) derived from the 2 lbs. is 180, the marginal utility or the addition made to the total utility by the addition of the second lb. is 80 units (180-100).

The student should in this connection note two points, first, the marginal utility of a commodity is not the same as the utility yielded during the consumption of the last increment. Thus when 2 lbs. of tea are consumed by our suppositious person, it must not be assumed that he gets 80 units of utility while consuming the second lb. The utility of the second lb. is not the marginal utility, when 2 lbs. are concerned. Because, although the difference made to the utility by the addition of the second lb. is caused by the consumption of the second lb., we cannot say, that the difference measures the utility got from the second lb. The addition of the second lb. might have

affected the enjoyment of this first lb. so that his second lb. yielded more or less 80 units of utility.

The second point to notice is that it is not always possible even in theory, to assign definite amounts of utility in the initial increments of a commodity, because these initial utilities may be vast and indefinite, as for instance, in the case of water.

We would now proceed to discuss a second law, namely the Law of demand. law of demand. But before we state the law, we would first note what is meant by demand and demand price.

Demand is indicated in offers of things of value for things of Demand. value. Under modern conditions offers are ordinarily made in terms of money. We may then speak of demand as an offer of money. It is to be observed, that demand, say for rice, means neither a price, nor a quantity of rice, but the prices which will be paid for different quantities of rice. Demand, then, states the relations between the quantities that might be purchased and the prices.

Because of the law of diminishing utility, people will almost Demand price. always offer less and less per unit of additional supplies of a commodity for consumption in a given period of time; that is to say, assuming that the article is tea, price would need to be lower if 3 lbs. were to be bought than if 2 lbs. were to be bought by any person in the month.

To be exact, we should call a person's demand price for a given quantity of a thing, as above described 'marginal demand price' to differentiate it from what the person would give, if he were to go without the thing altogether. This latter payment would obviously be governed by the aggregate and not the marginal utility of the given quantity of the thing in question.

But combining the demand of all individuals in a market, we get market demand prices. Now a market consists of many individuals ; and the demand of a market consists of the sum of the demand of all individuals included within Market demand price. the market.

Now these individuals are not all of the same status—some are rich, others are poor, some have a strong taste for the commodity, others are only moderately inclined to it. A given fall in the price of a commodity will not therefore affect exactly in the same way the demands of all individuals ; the fall will increase greatly the demand of some persons, will increase the demands of other persons in a less degree, and so on ; but other things remaining equal, the fall in price, however small, will increase the total demand for the commodity in the market. And other things being equal, a

rise in the price of a commodity, however small, will diminish the total demand for the commodity.

We are now in a position to state the law of demand which is generally formulated as follows :—

The greater the amount to be sold, the smaller must be the price at which it is offered in order that it may find purchasers ; or in other words the amount demanded increases with a fall in price and diminishes with a rise in price. There will not be any uniform relation between the fall in price and the increase in demand. If the price of a commodity falls by 25 per cent the demand for it may be increased not by 25 per cent but by 20 per cent or by 50 per cent or even by a different percentage altogether.

It will be seen that this law is connected with the Law of Diminishing Utility according to which the utility of successive units to a man is less and less and so the amount demanded increases only with fall in price.

One of the most important attributes of demand is what is called elasticity. The term elasticity is used in a technical sense. The elasticity of demand in a market is great or small according as (1) the amount demanded increases much or little for a given fall in price and (2) as the amount demanded diminishes much or little for a given rise in price.

Elasticity of demand. Elasticity varies with price. In general the elasticity of demand for a commodity within any class of people will be great for high prices and the elasticity will be great or at least considerable for medium prices, and the elasticity for demand will diminish as the price falls; and it will gradually fade away if the fall in price is so great that the satiety level is reached by the members of the class.

It should be observed that elasticity of demand is a relative conception—relative to the class to which the demand relates. Thus while demand for luxuries may be elastic with the rich, it may be inelastic with the poor. Again although demand for necessities is generally inelastic for all classes, what may constitute necessities for the rich may be expensive luxuries for the poor.

We may pass on to a third law of great importance and which we shall discuss as briefly as possible. This is what is known as the law of indifference.

This law affirms that as regards expenditure at any one time, we all tend so to regulate our purchases that the marginal satisfactions, per unit of expenditure, we may expect to derive from different things become equal. This follows from the fact that we will want to get as much satisfaction as possible out of our incomes. In order that we may derive that maximum satisfaction from our incomes, we generally so apportion our outlays that pennyworths of everything may yield

at the margin the same satisfaction. That is, when a person spends 4d. a pound for milk and 1s. a pound for butter, he will buy such quantities that the marginal utility of butter to him per pound becomes approximately 3 times the marginal utility of milk to him per pound.

We would bring this chapter on consumption to an end by a brief discussion of the doctrine of consumer's surplus which has, of late, been gaining in prominence, in advanced economic theory.

**Consumer's Surplus.** When I purchase anything the marginal or final unit of outlay is responsible only for my marginal satisfaction. The rest of the outlay yields more than marginal satisfaction per unit of expenditure. The excess of satisfaction derived over and above the product of the marginal satisfaction and the number of units of the thing purchased may be called the consumer's surplus of satisfaction. I would have lost this amount of satisfaction, if the thing did not exist. Suppose I pay 4 annas a seer for milk and purchase 30 seers of milk a year. Suppose I would pay Rs. 15 for these 30 seers of milk, rather than go without milk altogether. This means, that the aggregate of my demand prices for milk upto the 30th seer amounts to Rs. 15. Then my consumer's surplus derived from milk is Rs. 15 less Rs. 7 as. 8 ( $30 \times 4\text{as.}$ ) that is Rs. 7.8 annas. I would lose this surplus of Rs.  $7\frac{1}{2}$  if milk was non-existent.\*

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\* The naïve illustration above should however be qualified by the statement that the computation of consumer's surplus as made above in terms of money, would be true only when the total sum spent on milk is smaller as compared with my total expenditure. For the objections raised against the doctrine and its rehabilitation, the student is referred to Marshall's "Principles".

## CHAPTER IV

### Production

Producing is making utilities. Man cannot create matter, he can only produce utilities. "All that man can do," to quote Prof. Marshall, "is either to re-adjust matter so as to make it more useful, as when he makes a log of wood into a table, or to put it in the way of being made more useful by nature, as when he puts seed where the forces of nature will make it burst into life." The work of production consists of producing form utilities, time utilities and place utilities. If you manufacture a table from a log of wood—you produce form utility. If you preserve fish or meat so that they will last for some time—you produce time utility. Suppose in your district, milk is cheap and you transport it to a place where it is dear—what is produced is place utility.

Widely understood, Production includes :—

1. Obtaining from land or sea, river or lake things which grow there or are found there—for instance, farming, rubber-planting, fishing etc.
2. The manufacturing or making up of things.
3. Transporting things.
4. Arranging for the distribution of things.
5. The direct furnishing of services to consumers—for instance, domestic service, singing, acting, etc.

The indispensable agents of production are labour and land; but Agents of Production generally it is said that the agents of production are labour, land, capital and enterprise (or organisation).

The word "land" is however to be understood to denote the whole of animate and inanimate nature exclusive only of human beings. We reserve detailed discussion of the agents of production to later chapters.

In the early stages of Society there was little or no division of labour among primitive barbarians. Every person Division of labour. lived a self-sufficient life. He tilled his own land, produced his own food, hunted animals, caught fish and made his own clothing. With the development of division of labour in the community, there was a far-reaching distribution of functions—some men became farmers, some fishermen, some shoe-makers, others clothiers and some carpenters and so on.

In the most advanced countries of the present day, organisation Conditions of divisions of labour have been carried to a very high degree of development, under machine production.

It is to be observed that to carry on division of labour on any considerable scale, an employer must engage a great number of labourers and that his ability to engage a large number of workers is dependent on the availability of large markets in which he may sell his products. Again the question of suitable markets becomes important in view of the fact that any far-reaching scheme of division of labour involves production on a large scale; and production on a large scale can be a practical proposition only when suitable markets are available.

Further division of labour, to be carried to any high degree, requires continuity of work. If the work becomes occasional, or seasonal, the labourer will be compelled to seek employment for himself, now and then, in other occupations as well, and thus there will be no complete division of labour. It is for this reason that there is more scope for division of labour in the manufacturing industry than in the agricultural industry.

The universal acceptance and adoption of the principle of division of labour is traceable to the manifold advantages that are inherent in the system.

**Benefits of Specialisation.** Thus division of labour increases dexterity in every particular workman. "The division of labour," Adam Smith observes, "by reducing every man's business to

some one simple operation and by making this operation the sole employment of his life, necessarily increases very much the dexterity of the workman." The sub-division of labour enables operations to be done with greater ease. There is repetition which makes a work perfect and accurate. Delicate tasks attain greater perfection by repetition. The speed of the work is thereby increased, the strain reduced and the co-ordination of hand and eye made more perfect. When a work is repeatedly done, physiologists state that an automatic connection springs up between the 'sensory' and the 'efferent' nerves without straining the brain in any way which is done in an act for the first time. The workman becomes an automaton and the brain remains fresh and vigorous. "The routine of work is handed over to the effortless custody of automatism." There are also productive advantages of specialised labour. If a workman specialises in one craft, naturally his work will be better in finish. He who has many tasks cannot do justice to any. Therefore the productivity of labour rises as labour is specialised.

**Machine work.** Specialisation of labour leads to inventions and application of machinery. If a man constantly works on in producing a thing, he will try to abbreviate the productive process. Application of machinery to industry inaugurates further economy. A machine is more reliable and efficient than human

worker. It is not liable to fatigue; it is not given to inattention; it is capable of unceasing regularity and uniformity of its products. Machine will increase the output and will reduce co-operative process to a few simple movements. Hobson therefore says: "Machinery can only aid man by increasing the motive-power at his disposal. Machinery enables forces of man or nature to be more effectively applied by various mechanical contrivances composed of levers, pulleys, wedges, screws, etc. Machinery enables man to obtain the use of various motor forces, outside his body,—wind, water, steam, electricity, chemical action. Thus by the provision of new productive forces, and by the more economical application of all productive forces, machinery improves the industrial arts". Machinery teaches order, exactitude, persistence and conformity to unbending law. But there is no room for variety, in a machine work, which is the essence of life. Machinery also works faster and more accurately and can press into the services of man the "stupendous forces of nature". Prof. Marshall holds that the use of machinery tends to increase the demand for the general qualities of judgment and intelligence.

With the introduction of labour-saving machinery, the question

*What becomes of displaced labour.* crops up—what becomes of the displaced labour. It has been held by many, and stressed by laymen, that machinery by making production easier and displacing labour creates unemployment—a problem which,

if true, is likely to be the grave of a nation. A little calculation would however show that, if not immediately, ultimately at least the labour-saving machinery would not introduce complications, and would rather bring in comforts. If machinery is introduced, things would be cheaper and the displaced labour would be employed in producing more as consumption will naturally be higher. Displaced labour may also be needed for making the machine. If the people get one thing cheaper, they can afford to buy other things in the production of which the displaced labour would be absorbed. Even if we put forward the absurd hypothesis that people would not buy other things more if they get one thing cheaper, still it may be said that machinery would provide more leisure for the workers without displacing them, and leisure is a great asset to labour. It is no doubt true that machinery would throw some operatives out of employment and the displaced operative engaged elsewhere would not have the same efficiency, at the first stage. So Prof. Chapman remarks—"The amount of labour displacement, if any, caused by new machinery depends upon the rate at which the new machinery is introduced. The duration of the unemployment caused, if any, depends (among other things) upon the powers of enterprise and capital to respond to a new situation and people's capacity to adjust themselves to new trades".

Another feature of modern industry is the concentration of industries in particular localities. It is called the localisation of industries. The chief products of industry are "carried on by specialised machines tended by specialised labour" and therefore the tendency of firms is to veer round to the place "where there are other firms engaged in the same trade". There are of course certain influences which necessitate a particular industry to travel to a particular place. First, cheap power in the form of coal or water. The coal fields are great industrial centres. Cheap power has naturally an attraction for industry. The next important factor is cheap labour. The next great influence is accessibility to raw materials. Accessibility to markets goes also a great way towards concentration of industries.

Localised industry offers great many advantages. In a particular place where many firms engaged in the same trade are grouped together, the worker gets a better market for his specialised skill, and the employer finds labour without difficulty and commands specialised market.

A localised industry therefore enjoys substantial advantages in connection with labour, the use of specialised industry, subsidiary and supplementary industries and also the quick development of new ideas relating to the industry. Excessive localisation may make cost of labour high to the employer and average money earnings of labourer's family low and may also lead to great sufferings during depression of the single industry.

As a result of specialisation of labour and the use of machinery, Large-scale production. the tendency to large-scale production is on the increase. The growth of large-scale enterprise is an important feature of the industrial world of to-day.

This is of course due to some of its manifest advantages. A large-scale enterprise offers greater opportunity for the employment of highly specialised workers of all grades; it can buy the best skill. A large firm has greater resources which can buy materials at a cheaper rate. The big concern is often more economic than the small one. A business requires advertisement for its goods. If it be a big concern, the cost of advertisement becomes comparatively lower; its selling organisation is comparatively less costly. In the world of competition, it is only big concerns which can keep their heads up; in years of depression, they can keep themselves going by falling back on the resources of their emergency and surplus fund reared up in fat years.

The small firms of course labour under great many disadvantages but it is remarkable that great concerns have Small-scale production. not been able to drive out small concerns. The small firm, though with drawbacks and lean resources,

carries on its business as if in scorn of the big concerns. There are many industries where large-scale method is not suitable. In agriculture, small-scale is advantageous. In dairy farming, the small farmer will do well. The detailed attention and necessary care are only possible, if small scale method is adopted. In small scale enterprise, the full utilisation of by-products and the adaptation of the means of transport are all possible. There are many articles for which there is no great demand—there the small firm is a necessity. There are many industries which are new and their methods experimental. In those spheres, the small firm plays an important part. In the industries where the processes could not be standardised, any large-scale enterprise would be wasteful and offer technical difficulties. If individual tastes are to be met, the need of a small firm is felt all the more. If you want a thing to be beautiful and artistic, machineries and factories would fail there. The impress of the maker's personality must be on the things, otherwise, things beautiful are not possible; that negatives machineries and rules out large-scale enterprise. Individuality is the essence of art and large-scale organisation produces uniform, steady and standardised things which can in no way cater for the artistic and individual tastes. Thus we find that in spite of the encroachment of large-scale organisation upon the industrial activities of to-day, small firms have carved out places for themselves and are standing erect, though blasted and affected to a certain extent, side by side with the large scale firms.

During the present generation, a new stage of large-scale production has been reached. When the different successive stages in production in one industry are united under one management, we have what is known as vertical combination. Vertical combination is a conspicuous feature in the iron industry. The Tata Iron Works in Jamshedpur is a good example of vertical combination. When several enterprises of the same kind are brought under one management, we get horizontal combination. Horizontal combination is more popular; it is effected to secure economy and limit competition. Trust embodies the principle of horizontal combination.

Vertical and horizontal combination.

Prophecy is a primitive virtue; but it can be safely asserted that the future of large-scale production in agriculture is not bright. The tendency of agricultural evolution is from extensive to intensive cultivation; so the agriculture of the future will assume more and more the form of small farms. Agriculture is to depend more upon season, less upon machinery. The future of small-scale production is, on the other hand, bright; it is favourable to distribution; from the viewpoint of productive efficiency, it is also effective. The future is for small producers, and

Future for small producers.

the socialistic principles which do not advocate capitalistic structure are sure to triumph.

In this connection, a digression into the conditions of India may be permitted. Here we find that India is a country of small-scale industries. True there are large-scale industries such as the iron and steel industries, cotton and jute mills, coal mining, etc. But we find innumerable small workshops of small producers, dotted over India and there are also cottage industries in the villages. These cottage industries are carried on by the workers with the help of their wives and children. The products preserve the impress of the artistic excellence and admirable skill of the Indian women on whose labours thrive those cottage industries. Cotton-ginning, spinning of thread and knitting, cane, and canes industries—all these are the chief occupations of women. The nation lives in the villages and the agriculture and cottage industries employ a large number of women. In a land of agriculture, small-scale industries are suitable, favourable and inevitable. In agriculture, the division of labour cannot be carried to the farthest limit; there is less use of machinery; agricultural operations cannot be reduced to a fixed routine. We have observed before that agriculture puts a limit to large-scale production. In India, the farms are small and an average farmer has small capital in his hand. Moreover, the subdivision of land by the law of inheritance is a great handicap to large-scale organisation. The Zemindars, if they will, may attempt large-scale organisation in agricultural operations; but the agricultural operation by its very nature has a tendency to small-scale organisation because of obvious advantages. India has been acclaimed as the originator of many of the subtlest and most artistic manual industries, and artistic excellence is possible in small-scale and cottage industries. Cottage industries give the labourer self-respect, economic and artistic freedom, and social and industrial stability; their surroundings are healthy, conditions of work stimulating, and nature of work ennobling. Industries which are to satisfy individual tastes (such as making of furniture, boots and shoes, tailoring, etc.), industries which are artistic (such as shawl and carpet weaving, finer kinds of cotton weaving, metal work, ivory work, wood-carving, etc.) and industries which produce coarse work—all these are suitable for small-scale and cottage industries. The chief virtue of a cottage industry is that spare and leisure hours of the farmers and of their women folk can be employed profitably. The small-scale industries are holding and will hold the field because of the healthy atmosphere which they create for the labourers; large-scale industries make men "living tools". The nourishment of small-scale industries should be provided both by the Government and the people by imparting

technical education, distributing financial help and organising satisfactory marketing.

India is now passing through a period of industrial regeneration. The chief industries of the country are:—(1) textile fabrics and dress, (2) food, drink, stimulants, (3) metals, metallic manufactures, precious stones and minerals, (4) glass, earthen-, and stone-, ware, (5) building requisites, (6) light, fuel and forage, (7) vehicles and vessels, (8) wood, cane, leaves, etc., (9) drugs, dyes, gums and chemicals, (10) leather, horns, etc. and (11) articles of supplementary requirements. Factories worked by mechanical power are increasing; industries are being organised on large-scale basis. Therefore, the fundamental question comes 'if manufacture will triumph over agriculture'. True, the possibilities of industrial development in India are immense because of her command of the raw materials. But it will remain an agricultural country and small-scale and cottage industries will not die out. The structure of the society and the traditions and conditions of the Indian people vote for small-scale industries. In the transport industries (such as steamers and railways), in the mining and metallurgical industries (relating to iron, coal, gold, petroleum, etc.), in many manufactures (such as sugar factories, oil mills, flour mills, woolen, jute and cotton mills, etc.), in insurance and banking and in retail trade, large-scale production is replacing small-scale production in India, but in spite of all these attacks and advances by large-scale production, small-scale industries are maintaining vitality and making them felt. The growth of co-operative movement and technical education are greatly helping the revival and nourishment of small-scale industries in India.

The benefits of the division of labour, or specialisation to be precise, are manifold. Specialisation increases the power of man to produce wealth of all kinds. The greater productivity of modern industry secured by virtue of specialisation, it must be admitted, has gone a great way in elevating the material conditions of workers. This improvement in material conditions is also an improvement in his moral and intellectual lives. This specialisation has given the worker increased leisure, increased income, better sense of comfort and has counteracted the "deadening effects of monotonous employment". The advantages accrued from the division of labour should not make us forget the fact that it has also brought evils in its train. Adam Smith says:—"The understanding of the greater part of men are of necessity formed by their ordinary employments. The man whose whole life is spent in performing a few simple operations has no occasion to exert his understanding. He generally becomes as stupid and ignorant as it is possible for human creature to become.

What division of labour has brought about.

His dexterity at his own particular trade seems in this manner to be acquired at the expense of his intellectual, social and moral virtues". The disadvantages cannot also be ignored. Firstly, the workman is, by virtue of the specialisation, treated as a means and not as an end. The factory system shows that man is intended for production—not production for man. Secondly, specialisation of labour brings in monotony of work for economic efficiency. The deadening effects of monotony chill the man and dwarf his spirit. Thirdly, general workers have no part in the organisation; their's is routine work which kills initiative, stupefies character and takes away the educational element. The great mass of workers are so many "cogs in a machine controlled by others" and their efficiency depends on mechanical regularity. Efficient organisation means the concentration of responsible work in the hands of a few specialised men whereas the mass of workers are being "specialised to automatic and non-responsible work". Fourthly, by being forced to be specialised, the worker is open to the risks of unemployment. His skill has a limited field and out of it, he is reckoned as useless, "an amorphous mass". A specialised worker has less adaptability and less genius for undertaking novel work to whose technique he is a stranger. And there is another danger and that is the technique of modern industry changes rapidly. A skilled worker may find himself a back number after a few months. The specialisation of labour pays the employer but not the employee to the extent he deserves. Karl Marx admits :—"Some crippling of body and mind is inseparable even from division of labour in society as a whole. Since, however, manufacture carries this social separation of branches of labour much further and also by its peculiar division, attacks the individual at the very roots of his life, it is the first to afford the materials for and to give a start to industrial pathology. Division of labour in the capitalist workshop converts the labourer into a crippled monstrosity."

### LAND

Land is a free gift of nature. The soil to be productive must have certain mechanical qualities: "mechanically it must be so far yielding that the fine roots of plants can push their way freely in it; and yet must be firm enough to give them a good hold. Chemically, the soil must have the inorganic elements that the plant wants in a form palatable to it." Land has often been impoverished or enriched by the work of man's hands. It must also be noted that the ownership of land gives possession of heat and light, of air and moisture. On a land, the people work till "the extra return got by extra capital and labour has so far diminished that it will no longer remunerate them for applying them". Thus we get at the law of diminishing return. This law is provisionally stated by Prof. Marshall thus:—

**Law of diminishing return.** "An increase in the capital and labour applied in the cultivation of land causes in general a less than proportionate increase in the amount of produce raised, unless it happens to coincide with an improvement in the arts of agriculture." Prof. Marshall explains it by saying that land may be under-cultivated and then extra capital and labour will give an increasing return until a maximum rate has been reached after which it will diminish again. Were it otherwise, every farmer would save most of his rent by applying all his capital and labour to a small part of his land. Improved methods may of course enable more capital and labour to be profitably applied. The final statement of the law of diminishing return is made by Prof. Marshall thus:— "Although an improvement in the arts of agriculture may raise the rate of return which land generally affords to any given amount of capital and labour; and although the capital and labour already applied to any piece of land may have been so inadequate for the development of its full powers, that some further expenditure on it even with the existing arts of agriculture would give a more than proportionate return; yet these conditions are rare in an old country; and except when they are present, the application of increased capital and labour to land will add a less than proportionate amount to the produce raised, unless there be meanwhile an increase of the skill of the individual cultivator. Secondly, whatever may be the future developments of the arts of agriculture, a continued increase in the application of capital and labour to land must ultimately result in a diminution of the extra produce which can be obtained by a given extra amount of capital and labour."

The importance of the law of diminishing return is indeed great both in the theories of Production and Distribution. Every farmer acts on this law without knowing it. When we apply more capital and labour to a piece of land, we get an increased product. There is a point after which the increase of capital and labour does not bring in corresponding increased product. At the first stage we get increasing return and after that, we get constant return after which the returns show a tendency to diminish. The law states that the increase of product is less than in proportion to the increase of capital and labour invested. We have just seen the law of diminishing return in agriculture. It also operates in fisheries, and mineral production. If the maximum limit of production is reached, more doses of labour and capital will yield less than proportionate returns. This law does even operate in manufacturing and other industries. The raw-materials of manufacture and subject-matters of all trade and transportation coming originally from soil are all affected by the law of diminishing return. The law of diminishing return may be counteracted by the

full development of the powers of soil and many-sided scientific discoveries, but a stage may be reached after which it will work with vengeance.

From the standpoint of production, this law is of vital importance. "If a manufacturer expends an inappropriately large amount of his resources on machinery, so that a considerable part of it is habitually idle; or on buildings so that a considerable part of his space is not well-filled; on his office-staff, so that he has to employ some of them on work that is not worth what it costs; then his excessive expenditure in that particular direction will not be as remunerative as his previous expenditure had been; and it may be said to yield him a diminishing return."

From the standpoint of distribution also, the law is important because each and every factor of production has some part in determining the share in distribution. We shall discuss this point in detail later on.

## CAPITAL

We have already pointed out that Capital is an important agent of production. We have also discussed its various classifications and its nature. We revert back to this topic, to draw the attention of the reader to its importance and its present-day indispensability in the economics of production. We propose in this chapter to discuss in as short a compass as possible, the growth and accumulation of capital.

We have already seen that all wealth is not capital. Wealth saved up and used for the purpose of production is capital. Any wealth which is used by the producer in his productive work is capital.\* In modern business, large capital is a necessity. It has three functions in an economic organisation. Firstly, in the form of tools, instruments, plant; it makes man's labour on Nature more productive. Secondly, in the form of stocks of goods and articles in warehouses and shops, it helps us to adopt a round about productive method which becomes lucrative in the long run. Thirdly, it emboldens us to take risks without which modern businessmen could not have the strength they possess to-day.

Capital is thus one of the factors of production or "an instrument of production". Capital by itself is not productive. If there are no labourers and no organisation, capital is "nothing but an inert matter and itself absolutely barren". The classical economists point out that capital is indispensable to production of wealth. The productivity of capital is emphasised by them; this is the naturalistic conception of capital. But the Socialists maintain that capital simply enables

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\* "Wealth which serves the purpose of production is productive capital; wealth which serves to bring in an income to its owner is lucrative capital."

one to command the labour of the other. The rentability of capital is emphasised by them; this is the juridical conception of capital. Capital, as Prof. Seligman calls it, is an adjunct to human labour and its function is the round about method of production.

The importance of capital in organisation is recognised by all.

Growth of Capital. If we consume less than what we produce, we accumulate capital. It shows a healthy economic condition when an individual or society lives within his or its income. But there are bad individuals who are great offenders in this respect. There are bad governments which are particularly guilty of waste. The saving of wealth is more or less a matter of habit. An amount of foresight is necessary for the growth of this habit, the wisdom of which is felt from painful experiences. In the West, the habit of saving is not strong, but there the flow of money is more smooth, and capital accumulates and travels. In India, the habit of saving is generally strong, sometimes ridiculously strong. Indians save money but they do not invest. Their sole purpose generally is to meet the marriage and sraddha expenses and hoard it for generations to come. But the people in the West invest their capital which increases the wealth and comforts of the nation. Psychologically, the motive of saving can be traced to family affection. It is human nature to see his family well-provided.

The essential condition relating to the growth of wealth is security of property. If disorder and chaos prevail in the country, the incentive to saving disappears as no one would hoard his property under insecure conditions. A government which is in a position to maintain law and order can give that sense of security which is essential for the growth of wealth.

The opportunities of using savings remuneratively greatly help the tendency of saving. The more there would be openings for new investment, the more there would grow the habit of saving. In the modern age banks, joint-stock companies, etc. are on the increase and people find it a profitable and safe proposition to invest. There is another consideration to be taken into account: the rate of interest greatly influences the growth of capital. If the rate of interest be high, that would tempt people to save. There is nothing wrong in the conception of interest. Interest is the reward of waiting—if not the reward of abstinence. There is both waiting and abstinence. If I give you a loan of Rs. 50/-, I am to wait for its repayment and to abstain myself from the enjoyment of the sum for a certain period. I may have enough to enjoy and the abstinence for that Rs. 50/- may not be visible or effective, still the element of abstinence is there. In any case, interest is not an unjust conception and the rate of interest is not a negligible incentive to accumulation of wealth.

In this industry-ridden age, wealth is concentrated and made by people uncultured. They accumulate wealth because it is their habit. They do not know the virtues of wealth. This uneven distribution of wealth is a great sore with the society. With all the disadvantages, the accumulation of wealth proceeds, and it "proceeds like a snow-ball". But to make saving possible, there must be a surplus above necessities of life. Saving without a surplus above bare necessities of life is an act of cruelty—it is neither wisdom nor happiness.

The conditions in India require an enormous amount of wealth  
Need of Capital for their improvement. But Indian capital is shy.  
in India. There are reasons historical which can be adduced  
to show why Indians are averse to invest their capital  
for productive activities; it does not mean that their people having  
wealth are averse to spending. They spend but not for productive  
enterprises. Necessarily, a great amount of foreign capital has been  
invested in India. Nationalist opinion founded on ignorance suggests  
that foreign capital is opposed to the political and economic progress  
of the Indian people. Saner elements in the country, however, acknowledge  
that the advantage from the employment of foreign capital  
remains with the country in which it is employed. Industries promoted  
by foreign capital have stimulated Indians to take to them. As  
for instance, foreign capital was invested in tea-plantations and when  
Indians have found that tea industry is a profitable and practicable  
one, they are becoming enterprising enough to go over to Assam  
forests and invest money in them. It is foreign capital and foreign  
organisation which have taught us these business lines. India requires  
capital for developing her mines, large-scale industries and  
modern forms of transport. Where would the money come from if  
all those improvements are to be made. It is not a fact that India has no  
money; the wealth of India was large enough to excite the cupidity  
of foreign adventurers. But Indian capital shirks enterprise. This  
static condition of Indian capital is responsible for bringing in the  
flow of foreign capital in constructing railways, establishing industrial  
organisation, setting up jute mills, cotton mills, woolen mills, sugar  
factories, etc. The educational value of foreign capital is thus great;  
"it is to the foreign capital that we must look largely at first for the  
introduction of new industries and for instruction in the economics of  
mass production. By admitting foreign capital freely India admits  
the most up-to-date methods and the newest ideas and she benefits by  
adopting those methods and assimilating those ideas." We find the  
employment of foreign capital in the petroleum industry in Burma,  
in the gold mines of Mysore, in the coal mines of Bengal, in the tea  
and jute industries and in the carrying trade by sea and financing of  
our foreign trade.

It must not be contended that foreign capital has no disadvantages; it has its abuses. Foreign capital employed in mines exhausts them which is a menace to the future generations. Foreign capital employed in manufactures takes away interest on the capital and large profit for the organisation and foreign management. Again, foreign capital under foreign management favours foreign commercial interests and this hampers indigenous capital and enterprise. It has created vast interests in India which are naturally antagonistic to national aspirations. The British trading interests have thus been a clog on the wheel of India's political and economic advancement.

The tragedy is that India's wealth lies hoarded and idle whereas foreign capital is employed for India's trade and industries. Things are changing for better no doubt but the progress is extremely slow. India lacks enterprising and banking mind. Unproductive use of wealth in India, in the form of jewellery and other things, is really scandalous, especially when it is made at the cost of her industries, sadly needed by the community.

### ORGANISATION OF INDUSTRY

Business management is the most fascinatingly complex problem in business organisation. There is one-man management which is called the single entrepreneur system. An entrepreneur is he who controls business, organises it and undertakes the risk of it. The entrepreneur or employer may not supply all the capital; he borrows capital, employs labour, buys materials and organises production with all possible risks. All these require high business capacity. A modern entrepreneur must be a specialist in business management. This is an age of specialisation and the work of business management is a highly specialised science requiring training. Division of labour, large-scale production, production in anticipation of demand, ever-changing demands, fluctuation of supply, risks of distant markets—all these have made the industrial organisation a complex one and the management of business without highly trained and developed qualities of mind and character on the part of the entrepreneur is not possible.

An ideal entrepreneur must have knowledge of human nature and capacity for leadership. He must have knowledge of supply and demand; he should also have technical knowledge of the materials and machineries used by him in his business; he must also have energy and enterprise; he should be bold but not reckless, cautious but not timid; he should possess sagacity, insight and foresight; he must have constructive genius of the finest type. But in actuality, the entrepreneurs fall far short of the ideal standard.

The entrepreneur controls the policy of business, co-ordinates the factors of production and takes up the whole responsibility of the business. He decides the prices of products, methods of production, markets for commodities, borrows the capital, determines the conditions of employment, pays wages to labourers, buys raw materials, gets profits or risks loss, saves, wastes, etc.—in fact he is responsible for the efficiency or inefficiency of the business. Thus we find that the success or failure depends upon the entrepreneurs. Carlyle calls them captains of industry; Walker says they are the master class.

The strength of the private firm is in the union of interest and responsibility. Centralised control saves a great deal of routine and redtape and makes business mobile and quick. "Julius Cæsar was always willing to risk everything on a pitched battle, because he was fighting with his own hand while Pompey with senatorial party dependent on him and advising him dare take no risks; the head of a business in a speculative trade requires very much the same qualities as a general."

With the growth of industrial democracy, the rule of a business by such a powerful master is not likely; the increasing strength and solidarity of the labouring classes and the growth of socialistic principles make the future of one-man management very dark. What is monarchy among governments, the single entrepreneur system is among types of business organisation. The single system is suitable for small-scale business and dominates the field in agriculture and retail trade. But in a large-scale business, one man is not competent enough for many-sided duties and responsibilities; naturally the single system avoids new enterprise and experiments because the risks are too large for one shoulder. Moreover, large outlay for large business is too much for a single man.

The next is partnership business which is controlled and managed by two or more partners. "It is an association of two Partnership. or more individual entrepreneurs who are jointly and severally responsible for the management of the partnership business, for all its obligations and contracts." This is a better form because management is divided whereby more efficient working is assured as two brains are decidedly better than one. It introduces new blood; it is also helpful for bringing forward capital. Partnership possesses the elements of strength and flexibility. Prof. Marshall rightly says that when a business long established is decaying, the oldest and the simplest plan for renovating the energies of a business is that of taking into partnership some of its ablest employees. The chief great disadvantage of partnership business is that there is the apprehension of disagreement among the partners.

The third form of business-management is public joint stock company which adopts the principle of limited liability and has therefore diminished risks. In a joint stock company or corporation, the shareholders who invested their capital in the form of shares are the proprietors and partners and they are legally authorised to elect a board of directors. That Board manages business and acts as one legal person. A shareholder's liability is limited to the value of his share; the utmost he can lose is the face value of his share. But the corporation is liable to its last rupee. The organisation of a joint stock company is interesting. The shares are sold and every buyer (a shareholder) becomes a partner. The shareholders subscribe the capital and they are the proprietors. But the shareholders elect a board of directors who control the policy. Directors must have some shares; they are also not whole-time men, so they appoint salaried manager for looking into the details. Thus, the shareholders are the proprietors undertaking risks and raising funds; the directors look to the policy; and the salaried managers are in charge of detailed management. It is rightly held that a "shareholder is a sleeping partner who occasionally stirs in his sleep and delivers himself of more or less relevant utterances at meetings." In theory, the shareholder is the master but in practice, he is merely a sleeping partner. Thus the control becomes oligarchical; the managers are appointed by the board of directors; this board is in effect a self-elected oligarchy which in extreme cases of mismanagement is liable to be turned out by a revolt among the proprietors (shareholders). Prof. Marshall says that the expansion of Joint-Stock Companies has resulted in the general democratisation of the ownership, as distinguished from the control of business. Hobson expands the point further by saying that "in form, therefore, an economic democracy, with an elective responsible government, the Joint Stock Company is in most instances a close oligarchy: the monetary support of the public is wanted, but not their direction."

In theory, the capitalisation of a Joint-Stock Company stands for the actual investment of capital by the shareholder but in practice, it is an arbitrary affair; the actual investment does not square with the authorised capital. Thus we are to distinguish between authorised capital, subscribed capital and paid-up capital. Authorised capital refers to the capital authorised to be raised under the constitution of the company; subscribed capital refers to the nominal value of shares actually sold; paid-up capital refers to the capital actually paid by the shareholders because the whole value of the share is not paid up at a time. Therefore, it is folly to be attracted and charmed by authorised capital; that is a trick to waylay unwary investors.

Shares are of two kinds : preference shares and ordinary shares,

The profits (which are called dividend) on preference shares are to be paid before dividend is declared upon ordinary shares.

A Joint Stock Company also borrows money from outsiders in the form of bonds (debentures, etc.) "on which interest is paid at a fixed rate",—the principal borrowed to be paid off by the company after a certain number of years. In this case, the shareholders undertake the risks and the bond-holders are the creditors of the Company.

It is held by many that over-capitalisation meaning the nominal capital or authorised capital being larger than the invested capital is bad because it deceives the public about the excessive profits made by the corporation. They contend that corporations should not be allowed to make unreasonable profits by exploiting society. Over-capitalisation also deceives the investors who remain ignorant of the exact amount of capital invested.

The advantages of a Joint-stock system are manifold; the limited liability principle diminishes the risks of shareholders, encourages new experimental enterprise, and opens the way for investment which stimulates saving and increases the growth of capital. It is expected that there will be more efficiency in management as a Joint Stock Company aided by honest and qualified directors and trained and well-paid managers has more resources for business; there is permanence and stability whereas in the single system, there is the possibility of disruption after the death of the entrepreneur. Spending huge sums for large business is only possible in the case of a Corporation or Joint Stock Company. But the disadvantages are also not to be ignored: rash and speculative enterprises are encouraged as everybody's money is nobody's money; the easy transferability of shares weakens responsibility among shareholders; the diffusion of responsibilities and risks of the business among the shareholders, directors and managers hampers incentive to honest work; unscrupulous managers can spoil the whole organisation; dishonest directors are a real menace; want of link between the employers (shareholders) and employees (managers and assistants) encourages evil. It is a fact that trade honesty is on the increase and let us hope that the disadvantages will melt away in the course of time. Joint stock system is extremely suitable for large-scale enterprises and for experimental and speculative businesses. Therefore in the modern age, the Joint Stock System is the dominant form of business organisation. This system is beneficial to the community, if the defects are remedied by legislative machinery and educative propaganda. In business which requires the investors to wait very long for their return, Joint Stock system is the only alternative. This system is beneficial to the society by enabling the

holders of small savings who are out of touch with the business world and entertain no desire to come into any profiteering transaction, to invest their savings remuneratively ; by enabling large capitalists to distribute their capital among many enterprises " avoiding the risk of carrying all the eggs in one basket "; by providing openings for people with organising ability but no capital. The Joint stock system harms the society by facilitating absentee capitalism—a much greater evil than absentee landlordism.

The limits of the Joint-stock enterprise are pointed out by Adam Smith :—"The only trades which it seems possible for a joint stock company to carry on successfully without an exclusive privilege, are those of which all the operations are capable of being reduced to what is called a routine or to such uniformity of method as admits of little or no variation. Of this kind, first, the banking trade ; secondly, the trade of insurance from fire and from sea risk and capture in time of war ; thirdly, the trade of making and maintaining a navigable cut or canal ; and fourthly, the similar trade of bringing water for the supply of a great city." Though Adam Smith has unduly limited the number of cases, the principle is sound. Roughly speaking, in the field of large-scale enterprise, the success of Joint-Stock enterprise is assured.

### THE LAWS OF RETURN

We have found that the factors of production of wealth are labour, land, capital and organisation and there are three laws which govern the co-operation among these factors—the Law of Increasing Return, the Law of Diminishing Return and the Law of Constant Return. Prof. Chapman abstractly phrases the laws thus :—The expansion of an industry, provided that there is no dearth of suitable agents in production, tends to be accompanied, other things being equal, by increasing returns. The expansion of an industry, provided that additional supplies of some agent in production which is essential cannot be obtained, is invariably accompanied at once or eventually, by decreasing returns, other things being equal." To be more clear, we can say that "an industry is subject to increasing returns if the price of its products falls with the industry's expansion, to decreasing return if the price rises and to constant returns if the price does not alter." When there is an increase of capital and labour in an industry and it is followed by more than proportionate increase of product, we say we have increasing returns in the industry. When an increase of capital and labour to an industry is followed by less than proportionate increase of product, we have decreasing returns in that industry. But when the increase of capital and labour is counterbalanced by the proportionate increase of product, there are

constant returns. "The expansion of a manufacturing industry leads generally to increasing returns and the expansion of an industry engaged in obtaining natural products leads generally to decreasing returns." Prof. Marshall remarks—"We say broadly that while the part which Nature plays in production conforms to the Law of Diminishing Return, the part which man plays conforms to the Law of Increasing Return." In manufacturing industries, there are generally increasing returns which may be brought about by providing more scope, along with the increase of capital and labour, for division of labour, specialised machinery and other transport facilities and more efficiency in organisation of large-scale enterprise. But in industries, engaged in producing raw produce (*i.e.*, agricultural products), the tendency to decreasing return comes quicker. In the long run, decreasing returns are inevitable in every kind of industry but in manufacturing industries, we get increasing returns for a longer time.

We may in this connection refer to the economies that arise from an increase in the scale of production of any kind of goods. The economies so arising are generally divided into two classes.

(i) External Economies—These are the economies due to the general development of the industry and not to the organisation and resources of any particular firm engaged in the industry *e.g.*, when an industry is localised in a particular locality, many external economies are realised by the different firms engaged in the industry through the development of subsidiary trades, the improvement of transport facilities and in other ways.

(ii) Internal Economies—Economies dependent upon the organisation and resources of a particular firm engaged in the industry are called the internal economies of that firm as distinguished from the external economies which are enjoyed by all the firms belonging to that industry. Internal economies may be due to a better division of labour, greater specialisation of machinery, more economical use of power and other things.

## CHAPTER V

### The Problem of Population

Of the two ultimate agents of production, land and labour (man), man plays the active part in the work of production and nature plays the passive part. Man is the chief means in the production of wealth; and also man is the ultimate goal of the wealth that is produced, because wealth is produced to satisfy the wants of man.

To appreciate properly the part played by man in the work of production, it is necessary to study the growth of population in numbers, strength and character and how the production of wealth is affected by these factors.

The modern history of the theory of population practically begins with Thomas Malthus, an English clergyman who published his celebrated essay on the principle of population in the year 1798.

Malthus' theory contains the following three propositions:—

(1) Population in a country tends to increase much faster than the food supply. Malthus employs mathematical formulæ and says that population, if unchecked, tends to increase in geometrical ratio, while food can only increase in arithmetical ratio.

(2) The tendency of the population to increase may be counteracted by two classes of checks—(a) positive checks—*e. g.*, infanticide, disease, starvation, wars, etc., checks which increase the number of deaths, (b) preventive checks—*e. g.*, late marriage, voluntary restraint, etc., which prevent people from being born.

(3) Malthus concludes that people should exercise preventive checks, *e. g.*, voluntary restraint, and should keep down the growth of population and thus prevent misery. If the growth of population is not checked by preventive checks, it would be checked by positive checks.

Malthus' theory has been criticised on more grounds than one.

Criticism of  
Malthusian  
theory.

It is pointed out by one class of critics that Malthus did not grasp the true significance of the law of diminishing return. It is said that Malthus

did not clearly realise that the law was elastic and that the operation of diminishing return relating to food supply could be counteracted by (a) improvements in the art of agriculture and better organisation of labour; (b) by increasing return in manufacture and by the importation of food.

There is again the biological criticism which asserts that man becomes less prolific with advancing civilisation. The fertility of the human race, according to the argument, diminishes with the intellect-

ual and moral development and so there is no danger of over-population in future.

Further it is pointed out that the extinction of the old world pride in a large family, the prohibition of employment of children under education and factory acts, the considerable rise in the standard of living among all classes in countries like Britain, France or U.S.A., and the rapid increase in wealth in those countries by reason of increasing use of machinery and scientific inventions and the system of large scale products—all these tend to diminish the rate of growth of population, at least in the western countries, and to that extent Malthus is regarded as a false prophet.

In spite of these criticisms, however, one cannot ignore the element of truth in the Malthusian theory.

**Elements of truth in Malthusian theory.** The fact that in rich and progressive countries like Great Britain and France and U. S. A., increase in population has been kept in check partly by positive checks (disease, war, etc.) and partly by preventive checks (*e.g.*, late marriage, etc.) and also by the growing popularity of the preventive checks, proves that the invalidity of Malthus' theory is only apparent and not real.

Thus again in poor countries like India, China, etc., where the population tends to increase faster than the food supply and the growth of population is kept in check by the severe actions of positive checks like famine, disease, etc., the Malthusian theory seems to apply.

It is pointed out by some writers, again, that in the remote future when all countries of the world will be thickly populated, sooner or later, Law of Diminishing return will begin to operate and consequently wealth will increase less rapidly and then the danger, visualised by Malthus, that population will tend to increase faster than wealth will manifest itself.

### THE INCREASE OF POPULATION

The growth in numbers of the population of a country depends on (1) natural increase, that is, the excess of births over deaths and (2) on migration and immigration from another country to that country.

(1) The number of births varies largely according to climate and habits and customs relating to marriage.

(α) Marriages are earlier in hot climates than in cold and temperate climates. They are earlier in India than in England. The earlier the age of marriage in a country, the higher will be the birth-rate, and the later the age of marriage on the average, the smaller will be the number of births per marriage.

(b) The institution of marriage and the social and religious customs relating to it, are a controlling factor in the growth of population. Thus in India, religious customs make the marriage of a Hindu girl practically compulsory while she is in her teens. Again, in certain rural parts of Europe peculiar social customs preventing more than one son in each family from marrying are prevalent.

(c) It should be further observed that, other things being equal, the average age of marriage for any class depends on the standard of comfort of that class and the ease or difficulty with which a young married couple will be able to maintain that standard of comfort. In Bengal, for instance, the age of marriage for males among the middle classes has been considerably raised within recent times because of the increasing difficulty of maintaining a family according to the standard of comfort prevailing among the middle class.

(2) The second great factor in the growth of population is immigration. The rapid growth of population in the United States is due, in a considerable measure, to immigration into the United States from Europe. There is practically no immigration into India from foreign countries; and in fact, India at the present moment, stands more in need of production of wealth and food supply than population. She rather requires relief from the pressure of population; this relief can perhaps be provided by migration into suitable colonies abroad.

Let us now examine the whole question with reference to India, Problem in India. Population has an inherent tendency to multiply. If human welfare be our concern, this state of multiplication often beyond the means of subsistence given by nature should not be allowed to go on *ad infinitum*. No one disputes the need and importance of a large population. But it is absolutely a static view to find virtue in the mere numbers of population. Over-population brings about poverty, lowers down the standard of living, increases the mortality, results in vices and diseases; in short, it is responsible for moral and physical degeneration of a people.

Institution of Let us first take the institution of marriage. The standpoint  
marriage. with which marriage is looked upon has got a good  
deal to tackle the problem of over-population. The  
younger the couple, the greater the possibilities of  
production. Moreover, Indians regard marriage as an essential condition  
of leading a worldly life. It may be urged that only those should  
marry who are physically and mentally fit for the propagation of race.  
Malthus suggests abstinence from marriage as a remedy for over-  
population. But that may be regarded as too much of a strain on  
human nature. The best method, therefore, is the adoption of the  
principle of late marriage.

Then the question of birth and death-rates. High birth-rates Birth and death rates. show a primitive state of society. It is an axiom that the death-rate will be high where the birth-rate is high. India has a high birth-rate and a high death-rate. The remedy is the diminishing of the birth-rate which can only be effected by social reform movement. To tackle the population problem, the whole mental outlook shall have to be changed. Late marriages, respect for human lives, high standard of living, restraint in married life, proper education, rationalisation of social customs, training of the married couple in the domestic responsibilities, intellectual attainments—all these are necessary to counteract over-population. India sadly needs them. There is nothing extraordinary in India in the indifference to human life. But the traditional outlook must be given a new orientation and the evaluation of social customs should be assessed from a rational standpoint.

Sir Herbert Risley has held there is no over-population in India.

**Sir Herbert Risley's views.** Firstly, there are places which are densely populated but there are also ample areas which are sparsely inhabited. Secondly, even in densely populated areas, there is ample room for expansion. Thirdly, the opportunities for employment and the fertility of the soil clearly prove that pressure on the means of subsistence is practically negligible. Fourthly, the complaint about the insufficiency of labour is another proof that the soil can maintain more men.

True there are areas of low density in India but the further growth of population is not possible there. In Rajputana and Baluchistan, the soil is barren and sandy and rainfall scanty. In Kashmir, Sindh and Coorg, the low density is due to the "inhospitable character of the soil". Only in the Central Provinces and Berar, some development is possible.

In the populated tracts, there is no room for further expansion. Bengal has a density of 551 persons to the square mile. Bengal is thus more densely populated than Great Britain (460) or Germany (311) or France (189). This is the state of things in spite of the fact that agriculture (such as in India) supports a smaller number of persons per unit of space than manufacture (such as in the western countries). It is generally accepted that the limit of population that agriculture can support is 250 persons to the square mile. The Province of Behar and Orissa consists of 4 natural divisions: North Behar which is extremely congested, South Behar in which hills and jungles abound, Orissa which has unproductive saline soil along the sea coast and hilly tracts in the interior and the Chota Nagpur Plateau which is largely inhabited by the aboriginal tribes. The United Provinces has a density of 440 persons to the square mile. In Madras, the limit of cultivation

has been reached. Bombay is the only province where there are industrial towns which necessarily can absorb more population than the soil permits.

The rigour of the climate in the Punjab does not help further development and in the Indo-Gangetic plain, the pressure of population is a bit heavy.

The population problem can be tackled by a policy of colonisation How to tackle overpopulation. in Assam, migration to Burma and improvement of the fertility of the soil by irrigation. If the tea-planters in Assam fail to offer better terms, large settlements in Assam from Behar and Orissa and the United Provinces unless prompted by dire economic necessity are not possible. The land policy of the Government of India is an obstacle to migration. The growth of political consciousness among the Burmese may not be helpful to Indian migration. The separation of Burma which is recommended by the Indian Statutory Commission (1929) and the Round Table Conference (1930) will much more complicate the migration question. The development of agriculture of course depends upon irrigation which is working wonder in the Punjab; but there is a limit. In Eastern Bengal, Lower Burma and Assam, rainfall is assured and well-distributed, so irrigation is not a paying thing. Canal irrigation improves matters no doubt but it causes injury by depriving the riverain lands of the full benefit of river flooding, spreading malarial fever owing to excessive moisture diffused round about and causing a deterioration of the soil. Even conceding that irrigation will help matters considerably, still India with her present cultivable land is overpopulated; she feeds more than she can afford. Industrialisation which is not feasible to be pushed to its acme offers some openings for maintaining a part of the population.

## CHAPTER VI

### Theory of Value

The theory of value is the central pivot on which the whole economic theory hangs. Indeed, such is the fundamental importance of the theory that Economics has often been described as the "Science of Value". It is no wonder that this topic occupies the bulk of many treatises on economics; every other branch of the subject may be considered to directly or indirectly refer to this topic.

Unfortunately the term value is ambiguous—the word has not the same sense everywhere, e. g. in "value of diamonds," "value of bread," "value of good education" and so on. But the fundamental meaning of the word appears to be "usefulness". Thus anything that has a use, anything that satisfies a human want is said to have value. We have however to note the most important meaning of the word. The commonest sense in which the word is used is to denote the rate at which things exchange. Thus, if two coats can be exchanged for one book, we say that the book has a value which is double that of a coat. We hence get two chief senses of the term, namely, "value-in-use" which refers to the 'usefulness' of a thing, and "value-in-exchange". In works on economics, the word "utility" is used to mean "value-in-use," the term value being restricted to the latter sense.

It is important to remember that value is a ratio. Value merely expresses the relative ratios of exchange. Now in the present economic order, the value of everything is expressed in terms of money, since money has become the general medium of exchange. The amount of money for which a thing can be exchanged is called its "price". Prices are, thus, values in terms of money. The distinction is important since it is obvious that though there can be a general rise or fall in prices, there can be no such thing with regard to value. A general change of value is impossible, for, if the value of a thing increases in terms of another, the value of the latter in terms of the former must fall. The price system reduces qualitative differences in value to quantitative differences.

In what follows, we shall use the word value in place of the narrower term price, except where a sale is being considered. This would matter little, for prices roughly measure values.

In an earlier chapter we have seen that the price of which a consumer is willing to pay for a thing is determined by the marginal utility of the article to him. But what are the forces that determine the margin of utility? The answer is that the margin is determined by the relative force of supply and demand, or more precisely, at the

point where these two forces are in equilibrium. This equilibrium is brought about by the competition between buyers and sellers. The logic of the above assertion is clearly seen when we remember that if the buyers' demand remains the same in a market, the price falls when there is an increase in its supply. This is because the sellers endeavour to dispose of the whole stock ; but this can be done only if the price is lowered, for otherwise, the buyers would not extend their demands. So also when the supply is fixed, if the buyers become more eager to buy the whole stock, the price will increase due to competition between them. These considerations show that both the forces of supply and demand are potent factors in the determination of prices. But what would be the exact price determined by these forces ? It will be the price at which supply and demand balance. This point requires explanation. "Supply" here, means the amount that will be offered for sale at each of a series of prices ; while "demand" means the amount that will be bought at each of a series of prices. Suppose at the price Re. 1 the demand be for 300 articles while the supply consists only of 20 articles and let at Rs. 2 the demand reduce to 200 and supply increase to 50, and so on. We can thus construct the following table :—

Price (Rs.)	Demand	Supply
1	300	20
2	200	50
3	150	70
4	100	100
5	80	120
6	70	130
7	60	140
8	50	150

In constructing such a table we must remember that as the price rises the amount demanded falls, for it affects the willingness of buyers to purchase. But with increase of price the supply increases, for the willingness to produce increases thereby. Thus, a change in the price affects supply and demand in opposite directions. There is, hence, a probability that supply and demand will coincide at a certain price. This is when the price in the example we have given, is Rs. 4, and it is obvious that at this price no buyer goes disappointed and no seller is left with surplus commodity. This is a position of true equilibrium and it is here that the actual "market price" (here Rs. 4) is determined.

It would appear from the above that the problem of price fixation and hence of value determination is not, after all, a very tough problem. But it is otherwise. There are various influences which determine the effect of price-changes on demand and supply. Unless

we are careful as to what these influences are and how they operate we remain merely on the threshold of the problem. We shall here briefly touch a few points out of a legion that confront us in the study of this vast subject.

Let us first take the supply side. What determines the supply price of an article? What is the exact meaning of the expression "at price P amount A will be produced?" This means that when the price is expected to be P, the amount that can be produced at a cost less than or equal to P will be A, it being obvious that the supply will be A and no more, since none will produce at a cost higher than what the market price is likely to be.

It is again of great importance to note the operation of time element in the problem of value. The equilibrium between supply and demand may refer either to a short period or a long period. In case of perishable articles the period referred to is necessarily short and hence the supply is for the time being fixed entirely by the force of demand, as if the force of supply had remained still. In day to day market price is determined in this way. But this market price though fluctuating from day to day has a tendency to point towards a long-period equilibrium called the "normal price" around which it oscillates. In such a long-period equilibrium the price (normal price) is determined at the point which the *total* supply during the period equals the *total* demand during the same period. What this total supply would be depends on the conditions under which the article is produced, the extent to which changes in price affect the willingness of the producers to produce, the presence or absence of substitutes and a lot of other factors. The total demand would depend on the changes in utility, on the level of income of the buyers, on changes in habits, on the effect of price changes and the unwillingness of the buyers to buy and numerous other considerations.

The above considerations show the importance of the time element in the problem of value. During the short period, the supply is virtually fixed and the value would be determined mainly by the play of demand. In the long period, however, the supply would adjust itself to demand and often it would outstrip demand which generally changes to a comparatively smaller extent. In such cases it is the amount of supply that predominantly determines value.

We have seen that price is determined at the point where the amount demanded equals the amount supplied. Of the latter some have been produced at a cost below the price, some at a cost equal to the price fixed but none at a cost higher than it. Clearly the price fixed equals the "marginal" cost of production. In the short period the cost of production of a part of supply might be above the market price but in the long period this cannot be, for then those who were

producing at a loss would desist from production. Thus, in the long run, the price tends to coincide with the marginal cost of production.

The marginal cost of production is a function of the amount of supply and is not necessarily constant. In certain industries, with the expansion of production, the cost per unit and hence also the marginal cost\* decreases. Such industries are called "Increasing Return" Industries. In some industries, on the other hand, especially in the agricultural industries, the marginal cost increases with expansion of industries. These are called "Diminishing Return" Industries. Lastly, there are certain industries, in which the marginal cost remains the same, whatever be the total amount supplied. These are the "Constant Return" Industries.

In Increasing Return Industries, increase of demand ultimately means fall of prices and conversely decrease of demand results in rise of prices. The case is exactly reverse with Diminishing Return Industries. The prices in Constant Return Industries remain unaffected by changes in the amount of supply.

Just as the price in equilibrium tends to equal the marginal cost of production, so also it tends to equal the marginal utility in terms of money. We say "tends to" because the normal price is more or less an ideal phenomenon. At no time does the market price reach the ever changing normal price. The normal price is the goal towards which the market price ever moves.

It is obvious that in the same market, there can be only a single price for a commodity. This is due to the presence of competition. This obvious fact is known as the "Law of Indifference," or the "Law of Substitution".

From what has been said, it is clear that supply, demand and equilibrium prices are all inter-connected. They all influence one another. None of them can be described exclusively as either the cause or the effect of the other or others.

## MONOPOLY AND MONOPOLY PRICES

So long we have been dealing with cases where there are more than one producer or seller and more than one buyer. But frequently, either the supply or the demand is under the control of an individual or a group of individuals.

If the supply of product and services is made by a single selling agency, that industry is said to be monopolised. The essentials of monopoly are unity of action and exclusive control as regards price. Monopoly means that the selling agency must be one, no matter whether the firm controlling the said industry be one or more. If they

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\* We here follow Nicholson, Robbins and Seligman and avoid the subtle controversy over the Representative Firm.

are more than one, monopoly can be secured by combination. Monopoly makes no room for competition. There are certain industries wherein efficiency and economy can be secured by monopoly. The chief industries that fall within monopoly are the supply of water, gas and electricity ; tramways ; postal, telegraph and telephone services, etc. Monopoly industries generally require high initial expenditure. The cost of running a tram is great. An electric plant is expensive. Competition in such industries is difficult, wasteful and futile : "difficult because it is only possible by duplicating an expensive organisation for a limited market; wasteful because the service can be supplied at their theoretically lowest cost only if the whole market is served by a single plant or organisation, and in the case of communications, because efficiency is secured only by one system covering the whole market; futile because the superiority of the stronger competitor is increased by competition so that competition must result in the establishment of monopoly by the ruin or retirement of the weaker competitors."

Thus we find there are industries which by their nature tend to be monopolistic concerns. Railways also belong to this type. True there are different railway companies offering alternative routes between the same terminal points, still they stop in the long run in the race of competition in the interest of both the companies. Co-operation is inevitable, otherwise it would mean the ruin of the one—if not both. They thus in course of time assume the character of monopolistic concerns. "Hence railway history in the United Kingdom and America is a history of amalgamations and absorptions, and of conferences and agreements, legal or illegal, to prevent rate-cutting. The effect of these agreements is not necessarily to abolish competition but rather to substitute for competition in rates competition in facilities ; but such agreements lead in many cases to a pooling of the entire traffic over competing lines which is the abolition of competition." \*

Monopoly is a technical necessity to many important industries.

Monopoly—a technical necessity. This creates a new problem for the State. The general principle is that the State will not interfere in economic activities, relying on competition

which protects the consumers from the whims of the producers. In monopolistic concerns, competition is destroyed, so State interference is a question of necessity. The State gives legal sanction to monopoly. In granting the sanction, the State imposes conditions at its will. These conditions may take various forms : the State may limit the rate of profit; the State may limit the charges which the company may make; the State may own.

the plant and lease it to a company; the State may take over the complete management. The conditions are the indexes to the character of the State. Limiting the rate of profit has grave defects; that may penalise efficient management which brings in greater profit. The limitation of the charges is a more effective method: the charges of English railways are limited by the Acts of Parliament. But this interference with Railway rates is not also sound because if the *maxima* are set by the State, it does not protect the consumer but if the *minima* are set, it disturbs railway management and impairs its efficiency. The best course is to take over the management. State management is beneficial to the consumers who are in fact masters of the governmental organism. The profits will accrue to the State which will in their turn be employed for the welfare of the consumers. The fares are likely to be lowered as a set off against the profits. Greater efficiency is expected as the State, unlike private persons, will not be greedy so as to make large profits. But critics oppose State-management because that is a socialistic principle. They say that by removing the need of large profits, the chief check on waste and efficiency is given away. Public management may and often do result in the control by politicians who possess no technical knowledge but who are moved by political considerations or by the agitation of voters. Public management is after all the best management from the standpoint of the consumers. As regards railways, the State-management is a necessity because transport is a great factor in the scheme of national defence. There are strategic requirements which prompt the Government to take over railway management. Whether the State-management is good or bad, it depends on the traditions that the Government of a particular country possess. Jobbery and corruption are possible in both public and private managements. The economic considerations are not the only determining forces for State-management of public services; there are a good deal of political considerations. There can be no formulation of any hard and fast rule that one form of management is any worse or better than another; everything depends on the angle from which the question is approached. The consumers will fight for public management whereas private management may be more efficient and economical. There is however no wrong in the principle of the State managing public monopolistic services which are immune from the invigorating and exhilarating influences of competition. The State is one thing in Prussia and another in America. It cannot be decided in the abstract. It is a political rather than an economic question. "The limits within which the State can undertake economic services are set not solely by economic considerations but at least as much by the public spirit and social traditions of the citizens."

Monopolies may be classified from different standpoints. From one standpoint, monopolies may be classified into Natural, Social, Legal and Voluntary monopolies. Bengal has a virtual natural monopoly of Jute which grows in this particular province. Railway Companies, Gas Companies are instances of social monopolies. Legal monopolies are created by law such as patents, copyrights. Voluntary monopoly is combination of rival businesses by voluntary agreement. From another standpoint, monopolies are either local, national or international. They depend on the extent of areas covered by the monopolies. From a third standpoint, monopolies are either public, private or quasi-public.

The prime incentive to monopolistic combination is the control of price. And the monopolists who have control of supply and not of demand would naturally try to snatch the greatest profits from their products. But to extract the largest profit, they shall have to adjust supply to demand, otherwise high prices would fetch small gain. The principle of the greatest gain guides the monopolists. It is an elementary law of market that the higher the price, the smaller is the sale and the lower the price, the larger the sale. But the monopolist can easily limit the supply and enjoy great profit by putting higher price on his commodities. The monopolists can also have good profit by selling a large quantity at a cheaper price. The great question that confronts the monopolists is the elasticity of demand.

Monopolists no doubt get the control of price but they cannot afford to be whimsical. Fixing up inordinately high price will help the substitute commodities to flood the market. Their whims are also controlled by the State in the interest of the consumers. Therefore, prudent monopolists will be cautious and consult the interest of the consumers in the interest of themselves. Prof. Ely holds that the monopoly prices are generally high prices.

We have seen that technical considerations necessitate some industries to be monopolistic but the tendency to monopolistic combination is not merely confined to them. Competition forces prices down; it introduces new risks and diminishes profit. With a view to prevent the invasion of their market and to secure "their market and a steady trade by depriving their customers of any alternative source of supply," all monopolistic combinations take place. That is also the motive of patents, brands and trade-marks. If the industries are localised, combination becomes easier. The authorities can meet often and agree on a joint action to restrict the devastating effects of competition. If the number of firms engaged in one industry be too many, the chance of combination becomes feeble. Any common action by too many firms is next to impossibility. It is

found from general observation that combination is freer among large-scale industries involving large capital because too many firms cannot carry on expensive industries. Industries which are restricted by climate, local skill and natural scarcity in materials tend to combine. Where there are industries which are limited by the State, combination is natural. Protective tariff also encourages and facilitates combination. By protective tariff, the industries get the monopoly of the home market and naturally, they will try to extinguish competition among themselves. "The control of a national market is much more of a business proposition than the control of a world market."

Industries combine because there are specific advantages accruing therefrom and the motive of combination is the desire for monopoly. The chief advantage of combination is to make great saving. In a competitive market, large resources are spent for carrying goods to the consumers but combination economises those expenditures. The control over market is of great help to the producers. Combination helps to keep prices up and even to maintain price differentiation. Industries by combination get the consumers within their control and do often exploit them.

With all attractions for monopoly, there are obstacles to it. The

**Obstacles to monopoly.** feeling of hostility between two businessmen is of natural growth; they even court worries and losses, still their vanity and prestige keep them out for showing any tendency to agreement on mutually profitable principles. Moreover, there are firms which are strong and weak and the strong firms would be averse to any combination because they can go without it. It is only depressed market that brings out the chief advantages of combination. The difficulties of monopolistic combination are pointed out by an eminent economist in his usual trenchant, style:—"The troubles of the would-be monopolist are not ended when his combination is formed. If the monopoly is an amalgamation and over-capitalised, ordinary good management is not sufficient to produce dividends; if it is a pool or cartel, there will be constant quarrels over the proportions in which the trade is distributed among the constituent firms, and big firms will upset the equilibrium of the organisation by buying up smaller firms and absorbing their rights in the trade. No monopoly again, however complete, is unaffected by the general fluctuations of trade. In times of declining trade the German cartels have been forced to adopt the expensive device of paying bonuses on export in order to keep up prices in the home market, the only market where their monopoly is effective; the American trust meets the same difficulty by the practice of "dumping" a portion of its output abroad at any price. The concentration of the management of a whole industry into a few hands is economical, as will be,

provided that the few hands are equal to the task; at the same time there is a risk involved, the risk of putting all the eggs into one basket and several incidents in the history of the trust movement emphasise this risk. The mammoth business in competitive industry is usually based on exceptional ability, and industrial combination is no adequate substitute for such ability."

## CHAPTER VII

### Competition and Combination

The present economic system is competitive. At every stage, there is competition. The incomes of the people are limited, so they cannot have all they want. We get one, reject the other and fail to get the third. There is cold and I want a shirt. I may buy either a "woollen or a cotton" shirt; I shall not buy both. In this case the woollen industry competes with the cotton industry. Suppose I decide to purchase a woollen shirt for Rs. 10. I may hesitate and get a cotton shirt at Rs. 2 and spend Rs. 8 in a cinema with a friend. Here, cinema industry also competes with the woollen industry. The buyers have a choice. There is competition among different trades; there is competition even among the same trade, firms competing one another for the control of the buyers. I want a finished woollen shirt, it is obvious that there is competition among the shirt makers because I can get it from any makers I choose. But there is also competition among the drapers, among warehousemen, among manufacturers, among spinners, etc. "At every stage in the progress of wool from raw wool to finished shirt, there was competition for custom. Even a trust which controls the entire supply of one article suffers from competition because there are substitutes and other commodities."

There is also competition among the agents of production—land, labour and capital. Landowners offer competing sites, labourers offer their labour and capitalists their capital against one another. There are many ways whereby sellers induce the buyers. The very fact that the buyers have a choice has made room for keen competition. In the language of an eminent economist, the ways are that the "seller may offer the same article at a lower price; he may offer a better article at the same price; or may offer the same article in a more attractive wrapper; or he may advertise his article and so create in the buyer's mind, without the buyer being conscious of it, an opinion that his article is a superior article; or he may employ a persuasive agent or a traveller who is a Free Mason or a Local Preacher and therefore acceptable to buyers who are also Masons or Local Preachers; or he may offer some brand or patent or specialty which certain users insist on having."

As there is competition among sellers, so there is also competition among buyers. When I buy a shirt, I am not the only man who buys a shirt. People always crowd before good outfitters. The manufacturers like to buy good materials. There is always keen competition to buy good labour, good land and good capital. The competition among buyers

forces prices up and the competition among sellers forces prices down. But under normal conditions, the competition among sellers is stronger than competition among buyers. The seller must get rid of his goods but buyers are more free.

"Competition in the present economic system is like a head of water; we can build our weirs and embankments and they will give us a respite from its pressure but its force has not been abolished." Even a monopolist shall have to compete with other trades for labour and materials. No trade can get out of the pressure of competition. The strict meaning of competition, according to Prof. Marshall, seems to be the racing of one person against another with special reference to bidding for the sale or purchase of anything. He holds that the fundamental characteristic of modern industrial life is not competition; it is only a secondary or an accidental consequence. The term competition presupposes certain selfishness and indifference to the well-being of others. But it has been urged by Prof. Marshall with an amount of vehemence that Man is not more dishonest than he was; rather he is veering round to honesty. "Modern methods of trade imply habits of trustfulness on the one side and a power of resisting temptation to dishonesty on the other which do not exist among a backward people."

Modern competition is of two kinds: constructive and destructive. It is destructive when its anti-social forms and selfish impulses are made prominent; it is constructive when competition keeps up energy and its cessation is injurious on the balance to social well-being. Ideal altruistic co-operation existed neither in the past age nor does it exist in the present day; so constructive competition is an asset to modern industry.

Competition brings out the forces of conflict. In each trade, at each stage, there is competition and it gives rise to conflicting interests. Individuals compete as consumers and producers; both have different interests and the ugly race of thriving at the expense of others is the characteristic feature of the present economic society. But in the course of business transaction, it has been found that competition also emphasises the need of co-operation or combination. The weavers of Dacca have a common interest; they will co-operate against the invasion of others. All persons connected with a particular trade have a common interest. So we get the conception "the interest of the trade". The traders of cotton are at least united in their hostility to wool. Thus we get at "landed interest," "capitalist interest," "labour interest". "Competition tends to force us to struggle, fight, conflict with our neighbours; the desire to relieve ourselves from the pressure of competition compels us to combine, associate, co-operate with

our neighbours. We associate with our competitors in one economic group in order to compete more effectively with the other groups."

There is competition to buy and competition to sell. Likewise, there is combination of sellers and combination of buyers. Among the chief forms of combination of sellers, there are trusts, cartels, trade unions, etc.; co-operative movement on the other hand represents the attempt of combination among both producers and consumers, the latter class being most benefited. We shall now explain briefly trusts, cartels, trade unions and co-operative movement.

Trust is a common form of monopoly in America. In the Trust, different businesses unite and form a single business. It carries on vast operations with a large capital, it is a huge affair. In this age of modern capitalism, competition is very strong and it affects profits. All these bring about the formation of Trusts. It effects great saving and considerable monopoly revenue is expected from the regulation of output and prices. Superior access to raw materials and transport facilities is gained by Trusts. Tariff legislation has been described as the foster mother of Trusts. The chief advantages of Trusts are that they have more resources, more efficiency and more strong position in finances and credit. Prof. Marshall holds—"A Trust whose dominion is not threatened generally promotes steadiness both of output and prices, so far as it conveniently can. For it is inclined to that policy by the magnitude of its investments; by the broad interests which its chief proprietors commonly have in the stability of general business; and by that relative immobility which attaches to its gigantic organisation."

But the critics of Trusts point out that they kill the individuality of the different businesses forming the combination. The Trusts having great economic advantages due to combination kill also rival businesses by price-cutting and other sundry ways. They often take undue advantage of the shopkeeper and force the producers of raw materials to sell at cheaper rates because their vast resources help them to dictate. Such a gigantic organisation makes it impossible for outsiders to enter the industry. There are other grave defects due to over-capitalisation which characterises the Trusts. From the investigation into the Trusts in America, it has been found that the labourers suffer because they are not well paid by the Trusts and consumers suffer because the Trusts generally maintain high prices. The Trusts which command vast resources do corrupt the public morality, as in the United States, by bribing the legislators and judges; they are a veritable public nuisance corroding the body politic of the country by pandering to the selfish instinct of those in authority. Trusts need not be abolished but should be regulated by the Government and public opinion.

The Kartel is the chief form of monopoly in Germany. It is a looser form of industrial combination. Different businesses combine but retain an amount of individuality and liberty. Like the Trusts, different businesses are not merged into one. The Kartels act conjointly only as regards specific points, *viz.*, uniform price and regulation of output. The Kartels do not control management. So the Kartel is more easily formed to be more easily dissolved.

A Trade Union\* is "a continuous association of wage-earners for the purpose of maintaining or improving the conditions of their employment". If it be a trade union, or industrial union, or labour union, all are governed by the same motive. Wage-earners individually cannot do anything ; strength lies in unity and organisation. It is concerted action, backed up by an organisation, that tells in the long run. Individually they are nowhere but collectively they are dangerous forces which can improve or reprove the employers. A trade union is double-faced ; it has a fraternal aspect and a militant aspect. A trade union establishes a sort of *esprit de corps* among the members ; it also tries to improve the conditions of the members by fighting with the employers, if necessary. The fraternal functions consist in providing against sickness, accidents, superannuation, funeral benefits, etc., of the members. The militant functions consist in attempts to stand or die for improving the conditions and wages of employment and restricting the hours of work. All these require an organisation which must have a reserve fund, a competent staff and a network of branches seeking to carry out the programme, both fraternal and militant.

The trade union tries to achieve its object through legislation by the State. The trade union carries on an intensive campaign and various labour legislations regulating the conditions of employment and remuneration have been passed. The Factory Acts have sought to remove the abuses in the conditions of the employment of labour. Factory Acts have prohibited child labour, regulated the hours and protected the life, limb and health of the workers. All modern States have factory acts. By bettering the conditions of workers, higher efficiency of the worker and better organisation are secured. Thus the industrial future of the race is assured. Apart from economic gains, there are moral and political considerations which tend to encourage the cause of factory legislation. Moral considerations are

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\* "Trade Unions are associations of sellers who have a particular kind of labour to sell. Since they have usually nothing else to depend upon, these associations are peculiarly important to their members and in England are given a privileged legal position. They are the most obvious case of the stress of competition forcing people into co-operation or combination."

obvious because humanity wants to make life happier for all. Political considerations are that without labour contented, the administration is not free from spasmodic revolutions and outbursts which discontented labour is sure to bring about. The critics of factory legislation harp on the fact that the Acts interfere with liberty and violate the natural rights of the employers. It has also been said that such Acts diminish the output and as such injure the business. All these arguments do not stand the test of close scrutiny. It is a fact that labour cannot protect itself from the advantageously circumstanced employers and State interference is necessary in the interests of the workers. No fancied theories of natural rights or loss of output should stand in the way.

The extreme weapons in the hands of trade unions for improving the lot of labour in defiance of the wishes of the employers are the strike and boycott. A strike is a cessation of work by a body of workmen with a common consent in order to induce the employers to meet their grievances. The legality of the strike is now recognised. But if the strike be prompted by a general motive to paralyse the industry, that is illegal as has been pronounced in the Great Coal Strike of England. Strike for a particular grievance has thus no element of illegality. "Hartals" in India more or less partake of the nature of strike. The Indian National Congress occasionally declares Hartals for observance by all the employed. Hartals also mean cessation from work as a protest against some measure by the established Government. The Advocate General of Bengal, Sir. N. N. Sircar, has given his opinion that hartals are illegal. The advocates of hartal say that it is only a mental attitude of non-interference and as such the State cannot penalise it. However, the strike is a very favourite weapon with the worker and its continuity is assured by the Trade Union organisation. Through strikes, the workmen learn to trust one another and they also get into habits of mutual confidence. A successful strike teaches their masters to have respect for their workers and better conditions of employment and better treatment from the masters are secured. But if strikes are often resorted to, they may degenerate into destructive agencies. The strikers then stop the work, disturb and dislocate the business, occasion losses to the workers, injure the credit in foreign market and cause harm to the consuming public. Thus the strike has both sides and it must be adopted after cautious calculation and as an extreme step. If it can be avoided, it must not be adopted. An unsuccessful strike is a grave menace to the workers. An unsuccessful strike may also make the masters provocative and stiffen their attitude. That depends on the turn of events in the course of struggle,

Large-scale organisation, either joint-stock or individual, has been a cause of alarm to the labourers, consumers, small producers and borrowers. It affects labourers Co-operative movement. by whimsically giving them low wages, consumers by charging high prices, small producers by unfair competition and borrowers by extorting high rates of interest. Therefore, the ingenious device of co-operation has been experimented upon and has been found to be successful in combating all those above-mentioned evils. A co-operative society is "an association for the purposes of joint-trading, originating among the weak and conducted always in an unselfish spirit on such terms that all who are prepared to assume the duties of membership share in its rewards in proportion to the degree in which they make use of their association." Co-operation has been most successful in retail trade, less in credit and banking and least in production. There are various kinds of co-operation —co-operative production, co-operative purchase (consumers' co-operation) or co-operative store and co-operative credit.

In co-operative production, the labourers become their own employers, undertaking all the risks of the business. It looks like an ideal state that the two functions are united in the same persons. As labourers they get wages and as entrepreneurs they get profits. Such an arrangement is the most economical and greater efficiency is expected as all are interested in the business. But, in fact, co-operative production is not a successful experiment. There is want of skill in management ; the employees themselves being the employers, there is too much interference ; criticisms are misunderstood ; and management becomes inefficient. "Multitudinous management means relatively uncertain, indecisive and inefficient management."

Co-operative stores mean that the consumers of commodities form a company subscribing for shares and employing staff and this company purchases commodities and sells them to its members ; thus consumers become their own shopkeepers. The shopkeepers' commission in this way goes to the consumers. The consumers get commodities of proper quality as the co-operative store has no interest in selling bad commodities. Co-operative Credit means co-operation in borrowing and lending. The Co-operative Credit Societies are of two types, *viz.*, Agricultural and Urban. The co-operative credit societies for agriculture have the following features : (1) The members bring no share capital ; (2) they receive no dividends ; (3) they are jointly responsible to the extent of all their goods ; (4) all officers are unpaid generally, except the cashier or the accountant ; (5) all members are intimately known to one another. The members of the societies obtain loans at a reasonable rate of interest for agricultural opera-

tions. The unproductive use of loans is checked and thus thrift and saving are encouraged.

The urban co-operative credit societies have the following features :—(1) The members have share capital, (2) they get dividends, (3) they have unlimited liability, (4) the societies aim at developing credit. These societies are equally beneficial like the co-operative agricultural credit Societies.

The benefits of co-operative societies are obvious and Co-operative Credit Societies Acts have been passed by the Government of India in 1904 and 1912. The management of these societies in India is also democratic, the members appointing from their own body a committee. The accounts are duly audited. These societies are corporate bodies having perpetual succession, common seal, legal right to make contracts, etc. The shares are not liable to attachment and on the death of a member, his share falls on his heir. There are restrictions on lending and borrowing and safe investment of funds is one of its predominant features. Central banks finance these societies. This co-operative movement is doing immense good but it is not yet so popular as it should have been. The cultivators of India, though greatly benefited, keep aloof from these societies for the rigour of formalities, publicity of loans, and short credit. Moreover, the purpose of the loan is scrutinised and funds for capital and permanent improvements are not provided. The fact that a co-operative society is a semi-government institution also carries bad odour to the people at large ; it is really lamentable. And the co-operative societies are not enough in number in India to cope with the needs.

## CHAPTER VIII

### Unemployment, Overproduction and Trade Depression

In an age when the society was simple, the cobwebs of economic organisation were not built up, and greed and lust did not envelop human mind. There was no unemployment or, even if it existed, it was not a problem. Now a delicate and complicated economic structure has grown; work has been carried to the farthest point of specialisation and nothing is produced without being backed up by a complex organisation which is to utilise the services of different grades of labour. A single firm is nowadays an organisation of specialised workers, specialised machines and specialised departments. There must be perfect and harmonious co-operation amongst all, otherwise the whole organisation will be affected. The specialists must co-operate before they can produce anything of use. In the making of a simple cotton shirt, we require the services of weavers, spinners, cotton-growers, tailors and outfitters—all specialised in their respective work. Disorganisation in one branch disturbs the whole structure. When there is imperfect co-operation between the specialists, it hits the main industry and there is likelihood of unemployment and other dislocation. There is another aspect: because of scientific specialisation, production is carried on in anticipation of demand. Industries entirely working to order or contract have no future. When there is imperfect anticipation of demand, markets are glutted by products and over-production will bring in unemployment in the next stage. Over-production and under-production occur because the estimate of demand and supply is wrong. What is over-production? "It does not mean that more of the article has been produced than can be consumed or used; it does not even mean that more has been produced than can be sold. Any quantity of a thing that has a use can be sold, if the price be put low enough. What over-production of an article means is that more of the article has been produced than can be sold at a price big enough to repay its makers the cost of production, plus sufficient profit to induce them to go on producing at the same rate; all that has been produced can be sold but only at a loss."

Over-production and scarcity are due to the failure to anticipate demand accurately and adjust supply to demand evenly. But it is interesting to note that the cyclical trade fluctuations are the characteristic feature of the industrial age. "There is a time when producers in all trades cannot work fast enough to satisfy the demands of the market, employers in all trades cannot get the operatives they want; at another time producers in all trades cannot find a market for the goods they

are producing and employers in all trades dismiss or put on short time their operatives." What is the cause of this general movement up and down? *Firstly*, the different industries are one another's customers and colleagues. So the depression or revival of one trade affects the other. Producers are also consumers; if they spend less, other industries are affected. *Secondly*, there is a psychological force which acts for depression or boom of trade. A market is a crowd and has the psychological characteristic of a crowd. If an impression is formed that trade is falling, it will sweep the market; firms will begin to cut their prices and other trades will be shaken. Producers will hold out for high prices. Being unable to sell, they are unable to buy and the circulation of wealth is checked. They will begin to live on savings and investments. Thus production is checked. And a general trade depression will follow from a general impression. *Thirdly*, when the producer and consumer fail to agree on the terms of exchange, the production of wealth will suffer as exchange is checked. If the producers receive less in exchange for their products, they will restrict or suspend production. Thus the want of agreement between the producers and consumers may tend to bring about trade depression. *Fourthly*, there is another theory, strongly held by Prof. Jevons, that trade depression recurs at fairly regular intervals.\* His theory is that the initial cause of the depression was a falling off in harvests especially in tropical harvests, due to the falling off in the light and heat of the sun. *Fifthly*, credit system, a great factor in modern industrial organisation, accentuates booms and depressions. Restriction of credit drives firms into bankruptcy. A Bank is a credit institution; a fall in credit which means a "run" on the bank may dislocate the financial organisation and conditions of the country. If credit is affected and shaken by distrust and suspicion, banks will refuse to give aid to businessmen and businessmen on the other hand will refuse to deposit money; the result is financial and industrial depression. *Sixthly*, illegitimate speculation accentuates price-fluctuation and makes the task of anticipating demand and adjusting supply to it more delicate and difficult. *Seventhly*, trade depression is due to overcapitalisation of a particular business. Prof. Seligman points out:—"A period of good times may be initiated by large orders for some particular business—due, for instance, to a navy programme, to internal improvements, to a war or to any other large demand. Prices rise in that business, production increases, the movement spreads to other lines and the new enterprises are financed by loans from the banks or by the sale of the securities on a capitalisation

\* During the 19th century, a certain rough periodicity may be observed in the world crises transmitted from country to country. The important ones were those of 1825, 1837, 1847, 1857, 1873, 1884, 1890, 1893, 1900, 1907 and the war panic of 1914."—Prof. Seligman. And the year 1931.

proportionate to the anticipated earnings. The psychological character of these credit transactions is such that the capitalisation will inevitably be put too high. The hoped-for earnings do not come in an amount sufficient to justify the investment. The process of readjustment of overcapitalised values necessarily involves loss but readjustment there must be. If the realisation of its necessity is sudden, we have a crisis or panic; if it can be brought about gradually, we have a process of liquidation."

It must be confessed that trade crises are essentially modern phenomena. They are a product of the new system of business enterprise built upon capital and credit. It is contended that trade depression restores the proper balance of the different parts of industrial organisation by checking unhealthy business activity and adjusting production to consumption.

Better adjustment of production to consumption, construction of large public works, diffusion of knowledge and informations among businessmen, good currency and banking system—all these are suggested to counteract trade crisis and depression. To obviate the world trade depression of 1930, Prof. Keynes suggests a novel plan which is interesting. He says that large spending will help the situation and any saving will add to the depression. "With the large unemployed surplus" comments Prof. Keynes "of money already available for producing capital and goods, the effect of saving is merely to add to this surplus. Whenever you save five shillings, you put a man out of work for a day. What we need now is not to button up our waist-coats tight but to be in a mood of expansion and activity." Hoarding or saving if carried to excess, may thus be a menace, considered from the social point of view.

To revert to the question of unemployment ; one of the chief causes of unemployment is cyclical trade depression. Then there are products having seasonable demand and supply ; labourers engaged in producing those commodities are thrown out of employment in certain seasons. Industrial changes also may affect employment.

Unemployment problem can be tackled by governmental action. By organising insurance against unemployment, there can be relief for the unemployed.

Unemployment brings in many evils. An unemployed labourer becomes irresponsible ; he cannot nourish himself nor his family, so he tries to shirk his duties. That in a round way means that an unemployed father will drive the whole family into ruin by providing bad nourishment for the son and the mother of the son. And an ill-nourished mother is a menace to posterity. Unemployment of a citizen not only affects the present generation but also the generation to come.

## CHAPTER IX

### Speculation

An element of speculation could be traced in all business transactions, because production, especially in an age of specialisation, is generally carried on in anticipation of demand. I go to a shop and get a shirt ; this getting without waiting has been made possible because production has been complete in anticipation of my demand. A finished product presupposes a complex system of organisation ; there are materials, labour, machineries. The operation of the whole system is made complete not in response to demand but in anticipation of it. If the people do not want a shirt but demand a coat, the whole organisation suffers. Thus every business is a speculation and there is risk in every transaction. But there is no help : specialisation takes time and production has to be carried on ahead of demand on an estimate of it. If there is wrong estimation, the consumers suffer because they do not get the thing they want and the workers suffer because their labour loses value.

But when we speak of speculation, we do not mean the production in anticipation of demand ; we mean that kind of business which has a suggestion of socially harmful action. The essence of speculation lies in forecasting price movements and then buying or selling for profit. First there is forecast and then the speculator buys if prices are going to rise and sells if prices are going to fall. The whole thing is carried on on an estimate with an eye to future. If the estimate be wrong, there is the risk of loss ; if the estimate be right, there is the chance of gain. In forecasting price movement, the speculators shall have to see to the demand and supply possibilities of the commodity. When the speculators anticipate shortage with no corresponding falling off in demand, they expect prices to rise and they would buy intending to sell at a profit. The speculators do a good service to the society by steadyng the price fluctuations. Had there been no speculators, the shortage would have immeasurably helped the prices upwards. But speculators by bringing in products which have fallen short of sale make some profit of course but higher prices in the long run check consumption. By averaging supply and demand over a long period, speculation lessens price fluctuations. "The speculator corresponds to the governor on a reciprocating steam-engine." This is possible only when the forecast is right. But if the forecast be wrong, speculation will accentuate price-fluctuations and necessarily be harmful to the society. If a speculator sells his things wrongly thinking that the prices are going to fall, then his selling will

force prices down but when they would go up, they would go up like anything and speculators in their ruin will involve others.

But it has been contended, and perhaps rightly, that in the present state of science where organisation of industry is availing itself of the productive economics of specialisation, price fluctuations are inevitable and in that case speculation is necessary and the profits of speculators are justifiable. Demand must fluctuate; it fluctuates with fashion, it fluctuates with weather, it fluctuates with prosperity. The quantity of my demand will increase with an increase in my income. Human taste changes, so I want a shirt to-day but would reject it to-morrow for a coat. The hobble skirt, as is complained of, has halved the demand for certain important classes of textiles. In summer I would require silk but in winter, flannels. War causes demand for certain things. There are emergencies of strikes and lock-outs. Even in all these changing moods, you cannot expect industry to wait until demand has expressed itself because the methods of industry are round-about and prolonged. Some one is to make an estimate which would guide production and that some one is a "Speculator" who is helpful to society, far from being an evil. Like fluctuations in demand, there are fluctuations in supply also. If all productions were made to order, there would have been no risk due to fluctuations in demand. If there would have been a reservoir of produce from which to meet, that would have eliminated the risks due to fluctuations in supply. Both are economically unsound principles. But it has been found that firms enter into contracts to shift speculative risks on to the shoulders of dealers. By working to contract, there is no risk but industries cannot thrive upon contract order, so the room for speculation and its attendant risks cannot be avoided. Therefore, the tendency to specialising in speculation comes in. The successful anticipation of price-movement is the short cut to fortunes and the chance of such gains even at the risk of loss is warmly embraced by businessmen.

A refinement of speculation exists in dealing in futures. What is dealing in futures? Suppose I buy a commodity Dealing in futures. and delivery is to be completed within twelve months. If I wish to cancel the contract, I shall have to pay or receive the difference between the price at which I bought and the price at which the commodity stood at the time of cancelling the contract. "The essentials of this organisation for dealing in futures are an official price-list, a class of brokers, and a clearing house and bank." Suppose I like to buy futures; I am to act through a broker. There is no buying and selling and the transactions are registered. If the price goes down, the buyer pays; if the price goes

up, the seller pays. Thus the futures market is concentrated on price-movements and speculation becomes a specialised science. The study of price-fluctuations is not an easy task. In futures market, capital is economised but this payment of "differences" for the payment of the full price of the commodity is an encouragement to gambling; outsiders and traders with small capital are tempted to gamble and court ruin. Organised futures dealings make market delicate and sensitive; disturbance takes place oftener and artificial price-movements are facilitated. The futures market concentrates speculation which is inherent in all trade.

Thus we find that speculation cannot be considered in the abstract; it is the effect that justifies or condemns speculation. Speculation requires careful study, close watching, sympathetic analysis and imaginative grasp of the market; it is a highly technical thing. Therefore, speculation by outsiders or amateur people is wrong; that is an instance of illegitimate speculation. Businessmen often resort to the game of producing artificial price fluctuations. Price-movements can be effected by spreading false reports as to the state of supply or demand. Price-movements are also produced by buying or selling in direct opposition to one's forecast with a view to dupe others. Suppose a syndicate makes sudden and extensive sales for forcing prices down but secretly buys up all they get. This open selling produces impression in others that prices will go lower—so they would follow their example believing that the syndicate is surely working on private information. Thus prices will reach the lowest figure. But the secret buying will then be an open buying when they expect great profit at the cost of those duped by their manœuvres. That is the worst kind of illegitimate speculation. "Morally the action of falsifying the indicator which business follows is precisely the same in kind as the action of the wrecker who falsifies coast-lights to mislead ships; it is infinitely worse in degree." Speculation in buying and selling shares and land causes harm to the society.

Risks in business are generally met by insurance and combination. The best way of counteracting speculation is to educate public opinion as to its evils. The State by throwing all available informations open to the public may check illegitimate speculation,

## CHAPTER X

### Money

In the pre-economic stage of society each family was self-sufficient. Each family had to produce everything it needed. There was no specialisation and hence no need of any exchange. But later on it was discovered that if every producer becomes specialised in one branch of products, the products improve not only in quantity but in quality as well. With specialisation came the necessity of a mechanism of exchange. Exchange can be effected in two ways, directly and indirectly. The former is called Barter and the latter buying and selling.

Barter depends upon a double coincidence of "wants". A baker wanting a book must find out one who wants bread for which he is ready to part with the particular book wanted by the baker. Again, even if two people having a double coincidence of wants, have met, it is certain that any agreement as to the terms of the exchange cannot be reached except after a considerable amount of haggling. It is obvious that barter as a system of exchange is wholly inapplicable to a state of society like the present, one where consideration of time and smoothness of the working of the exchange mechanism are essential. Besides, specialisation has proceeded so far that any "double coincidence of wants" would be a matter of almost absolute uncertainty. To obviate these difficulties, we have adopted, almost unconsciously, an indirect mode of exchange, wherein every producer exchanges his commodity for a standard medium and later on, or simultaneously, purchases his own needs with this medium, usually called money.

The medium of exchange can be anything that is universally acceptable. A man will accept a payment in money because he knows that others will accept money in exchange for goods wanted by the former. Certain articles, e.g. gold and silver, have been accepted as money because due to their universal acceptability every one knows that, whenever necessary, they can be exchanged for commodities needed.

In order that an article may be accepted as a general medium of exchange, that is, that it is accepted universally, it must not only be familiar and easily recognisable but it must also possess a definite value of its own. However familiar a thing may be, it can never be accepted in exchange if it is worthless or if its value in terms of other commodities fluctuates rapidly. In the former case, there is no equivalence at all, without which there can be no exchange; in the latter case, there can be no certainty regarding terms of exchange and no

general exchange system can subsist when terms of exchange become in every instance completely unpredictable.

Paper money is a special case. Paper money is accepted as money in spite of its almost non-existent intrinsic value because it *represents* something of tangible value, generally a definite amount of gold in the vaults of the currency authorities.

Since the things exchanged must be equivalent in value, it follows that the general medium of exchange must also be the measure of value.

We have seen that certain metals such as gold and silver have been accepted by common consent as the general medium of exchange. Strictly speaking, gold and silver in metallic state are not money; they are still commodities, for a thing of a definite value can only be exchanged for an amount of gold having the same value and in the bullion state the uncertainty of the value of an amount of gold would operate against its being accepted as medium of exchange. It would be inconvenient too; for in every transaction it would have to be re-weighed to ascertain its value. Hence not gold and silver as such, but a definite amount of these metals stamped by the highest authority as a guarantee as to such quantity, will be accepted as a medium of exchange. In such a state, gold and silver are called gold and silver 'coins'. More of this will be said hereafter.

We thus find that the general medium of exchange, also called 'money', is *ipso facto* a measure of value as well. It must also be a store of value, for a measure of value which deteriorates with time would be worthless. Again not only must it not deteriorate, it must also remain practically unchanged as regards its intrinsic value.

These lead us to fix upon the following qualities as being essential for a good money material:—

- (a) Portability or ease of transport. This is the case when the money is of high value for its bulk.
- (b) General acceptability.
- (c) Durability.
- (d) Cognisability.
- (e) Stability of value.

Again to facilitate coining, the material must be homogeneous, durable and malleable. Gold and, to a certain extent, silver possess all the above qualities and that is the reason why they have been chosen as the money material. Of late, silver has become unstable in value. The result is that with almost no exception, every important country in the world has adopted gold as the standard of value. Recently, however, the value of gold also shows signs of instability. To this has been attributed, partly, the enormous miseries that have followed the present depression. No way out has yet been devised,

We have seen that paper money, that is, bank note or government note, owes its acceptability as money or the Paper money. general medium of exchange to the fact that it represents some amount of gold in the vaults of the currency authorities. This assertion is not strictly true. In point of fact, paper money owes its value mainly to the legal right of the holder to have it converted into an equivalent amount of standard money, generally, of gold, on demand. This will appear from what is written on government notes; e.g. "I promise to pay the bearer on demand at any Government treasury the sum of Rs—" and so on. Such paper money is called "convertible paper money". In America, paper money is merely bullion certificate. For the conversion of notes a stock of gold is generally maintained. The Bank of England maintains stock of gold which equals the face value of the total notes issued, less a fixed amount called the 'fiduciary' issue against which government or other forms of securities are kept. In most countries the stock of gold held fluctuates with the amount of notes issued, such stock being required to bear a fixed proportion to the total face value of such notes. The case is the same in India. Generally these countries can temporarily infringe these rules on payment of a heavy fine. Government and other safe securities are kept against the volume of notes uncovered by gold. It is to be remembered that except in India the authority issuing notes is generally not the government but the national bank of the country.

In certain cases, however, paper money is not convertible. Such money is called the "fiat" money. In some cases there is a promise to convert but the promise is not fulfilled; in others it is definitely made inconvertible. Even convertible papers often become inconvertible when, for example, the stock of gold runs low due to foreign exchange operations or when the currency authorities decide upon protecting their gold reserves for emergencies.

It is obvious that mere paper without any gold basis would not command the confidence of the people and so would have no value as money. This is so, but when the amount of inconvertible paper issued is kept within limits, even inconvertible paper continues as a measure of value. The reason is more psychological than economic. But it is very rarely, that inconvertible paper enjoys such a good fortune. The ordinary sequence is that the government cannot resist the temptation of issuing money for nothing—the result is that paper money is overissued and so it begins to lose value. According to Gresham's Law, bad money drives away the good, so that before long the entire currency consists of depreciated inconvertible paper. All confidence is lost in the currency system and disaster overtakes the country. A painful illustration is the German Currency during 1922-

23 when the Mark which is normally worth about 10 annas, depreciated to the ludicrous value of one-billionth of a pound. At the present moment, the pound notes have become inconvertible and their value has gone down by about 30%. The rupee has been linked to the sterling and consequently the value of the rupee has also fallen by the same amount. The result is that the prices of goods from Germany, America, France and other gold-standard countries, have gone up. The fact that pound notes are depreciated is but another way of saying that Britain has gone off the Gold Standard. But more of this later on.

The question most often asked to-day is "What is meant by Gold standard?" The answer will be clear from the following. Gold standard means that the standard currency of the country can be exchanged at will, for a definite amount of gold. Of course, if the standard currency is a gold coin as was the case in England a few years ago, there is no question of exchanging for gold. In this case also the country is on the Gold standard. Thus a gold standard does not necessarily involve a gold currency. A currency which can be exchanged for gold at a fixed rate, at will, is to all intents and purposes a gold currency without the uneconomic appendage of employing costly units as coins.

The essence of a gold standard is that all coins and notes are exchangeable at will into gold coins of equal face value or where there is no gold currency into an equivalent amount of gold. Again, in order that this gold standard may be maintained, it is essential that there should be a free market for gold; for, otherwise the market rate of gold may diverge from the mint rate, that is, the rate at which gold is given for the notes. The result will either be a rush to exchange gold for notes or notes for gold according as the market rate is lower or higher than the mint rate.

A variant of gold standard as mentioned is where a definite weight of gold is given for currency notes. This is called "Gold Bullion Standard," because gold bullion, not gold coins, are given in exchange. Generally a limit is imposed to the effect that gold bullion will not be given in exchange for a sum below a minimum. This is to ensure that there may be no frittering away of the gold reserve for every puff that blows over the money market. The standard ordinarily prevalent in India and England is the Gold Bullion standard. It must be remembered that rupee is but a "note printed on silver"; for like notes, it is a token of currency, that is, the face value is much in excess of intrinsic value.

A peculiar form of currency was prevalent in India before 1927. This was called the "Gold exchange standard". In this system rupees and notes were taken by the government in exchange for, not gold,

in either coin or bullion, but for demand drafts on foreign centres of gold.

The advantage of linking currency with gold is that, thereby stability of value of the currency unit is assured; for, due to the peculiar character of the production of gold, the value of gold is almost constant in terms of commodities.

We have referred to the Gresham's Law. This law simply means that "bad money tends to drive away the good". The good money is either hoarded, exported or melted away. The reason is this: when a people can afford to carry on with a cheaper currency, dearer currency will not be employed. Thus if full weight and underweight coins circulate side by side, the former will be worth more as bullion than as units of currency and hence it will be more profitable either to hoard, export or melt them down. Obviously the same thing results when depreciated paper and gold coins circulate together. The depreciated paper currency remains.

We have so long dealt with the conditions where the standard is gold. The same conclusions hold with regard to silver standard.

In France and other Latin countries, during the first half of the nineteenth century, an experiment was conducted to base the currency on a double standard of gold and silver. It was claimed, that by ensuring a broader basis it would be possible to steady prices, to stabilise the price of silver and to obviate the difficulties following from the changes in the supply of one metal. The system was called "Bimetallism," and in spite of its theoretical interest, it could not continue due to extraordinary increase in the production of gold.

In Bimetallism, it is essential that a fixed ratio should be maintained between the two standards. In practice, due to changes in supply, the market ratio often diverged from the legal ratio so fixed and hence at one time one metal was over-valued, at other times, the other was so. The result was that Gresham's Law applied; for, two currencies were in circulation—and when one is undervalued as currency it has a higher value as bullion and so goes out of circulation. The consequence was that Bimetallism tended to become an "alternate standard".

Price has been described as the amount of money for which an article exchanges in the market. Most, if not all, commodities are exchangeable for money and so money becomes the standard of value. The result is that prices serve as a rough measure of value.

Suppose the *price* of a thing has gone down but the prices of other commodities remain the same. The consequence is that the thing can be exchanged for less of other commodities than formerly. That is but another way of saying that the *value* of the article has

gone down. Thus, an individual rise or fall of price merely shows the fall or rise in the value of the article under consideration. Sometimes, however, the prices of all commodities go up and in the same proportion, so that, though the prices are higher, no article commands more of other commodities in exchange; only more money has to be paid for each purchase. In this case the values of the articles remain unchanged. Thus in case of a general rise of prices, the values do not alter and the same amount of money purchases lesser amount of commodities. So also in the case of a general fall of prices, the reverse is the case. These phenomena are generally expressed by saying that the "purchasing power of money" has risen or fallen. The reader will easily see that in such cases it is only the value of money that has changed. In case of money, the phrase "Purchasing Power" is used instead of value.

If all the prices changed in exactly the same proportion, it would be easy to see that the value of money has changed in the opposite direction to the same extent. In actual course of events, however, prices change almost in a haphazard manner and while for some articles, prices may be doubled at the end of a given period, for others, prices may rise far more or far less and may even fall. In such a case the calculation of the changes in the value, i.e. the purchasing power of money, becomes a bit interesting. To calculate the changes we have to refer to some "general" level of prices and to measure these changes on the basis of changes in such "general level". "General level" of prices is obviously a sort of average of all the prices.

In practice the method of Index numbers is used. Though theoretically all the prices without discrimination have to be included, in practice it suffices to consider the most important commodities alone. Generally about thirty to one hundred prices are taken and an *average* is taken of the *ratios* of these prices for any year to the corresponding prices of a fixed year called the "base year", after these ratios are multiplied by 100. The average gives the "general price levels" or the *Index Number* of prices for each of the years as compared to 100, the general price level for the base year. The value of money falls, when the general level of prices rises; for less amount of commodities can be purchased by the same amount of money. So also a fall in the general level of prices indicates a rise in the value or purchasing power of money.

Index numbers of prices are published in all leading commercial papers. We show briefly how an Index Number is constructed.

Let the base year be 1925 in which year let the prices of articles A. B. C. D. etc. be  $P_1 P_2 P_3$  etc., respectively. Let in the year 1930 the prices change to  $P'_1 P'_2 P'_3$  etc.

Then the ratios of 1930 prices to 1925 prices are :—  $\frac{P_1'}{P_1}$ ,  $\frac{P_2'}{P_2}$ ,  $\frac{P_3'}{P_3}$ , etc. The Index Number of prices for the year 1930 will be then the average of  $\frac{100P_1'}{P_1}$ ,  $\frac{100P_2'}{P_2}$ ,  $\frac{100P_3'}{P_3}$ , and so on. Thus if the number of articles be N, the Index number will be

$$\frac{100}{N} \left( \frac{P_1'}{P_1} + \frac{P_2'}{P_2} + \frac{P_3'}{P_3} + \dots \right)$$

Many treatises have been written on the construction of Index Numbers but all these deal with technical devices how to increase the accuracy of the Index Numbers. The basic principle everywhere is the same as given above. We have taken above the simple or the Arithmetic Average; but others have employed complex formulae to find out complex averages. Again, it has been the practice to *weigh* the prices to give stress upon the relative importance of the commodities. Weighing is nothing but multiplying the above price ratios  $\frac{P_1'}{P_1}$ ,  $\frac{P_2'}{P_2}$ , etc. by suitable integers before the average is taken, these integers being proportional to the importance of the articles included.

An important factor to be determined is whether wholesale or retail prices are to be taken and which articles are to be included. It all depends on the purpose for which the Index Numbers are to be used. If the Index Numbers are used to show the changes in the general level of prices, the wholesale prices are taken and preference is given to raw materials. If they are used to show the variations of purchasing power of the working classes, only those articles that are generally included in the working people's budgets, have to be included, and so far as possible retail prices have to be considered. The procedure must vary with the needs of the problem in hand.

Index Numbers show with reasonable accuracy the relative changes in the value of money but show no indication why these changes occur. Obviously such changes may be due to the innumerable factors affecting each individual commodity or to certain general factors affecting money itself, considered as a commodity. It is obvious again that the former set of causes are too numerous and complex to lead to any practical conclusions, but the latter factors, namely, those that affect the value of money directly, have been very profitably studied and such studies have led to certain important general conclusions. We shall deal with the problem after considering in a general way the effect of changes in the price level on the welfare of the community.

Generally, rise in the price level means that the same amount of money purchases a less amount of consumable articles conceived as a single compound of many things. Hence those whose incomes are practically the same over a period, for instance, those who receive a fixed income, whether in the form of pension, annuities or by way of interest from investments, suffer when the price level rises, and become relatively better off when it falls. These persons are affected most, by changes in the price levels. But there are others who can adjust their incomes to changes in prices, for example, those who are producers of commodities in constant demand. These people are almost unaffected by changes of price level.

Violent fluctuations in prices seriously affect the productive power of the community, since, in modern industry, production long precedes demand on the basis of an estimate of what the future demand is to be. We have seen that with fluctuations of prices, demand, too, changes, so that forecast becomes impossible. When the fluctuations are violent, changes in demand will be chaotic and business will be reduced to mere speculation.

But when the changes in the price level are gradual, the effect on production is not necessarily prejudicial. For, in the first place it is a paradox in economics that though with rising prices the purchasing power of wage earners fall, the wages themselves continue to lag behind the price level. The effect is obvious ; while the producing class, in a period of rising prices, gets higher prices for their goods produced ahead, at a lower cost, it has to pay lower wages. Hence the margin of profit widens and a fillip is given to production. But this gain is illusory, for profits are expended on consumers' goods and increased profits do not purchase increased amounts because the prices of goods purchased also rise almost simultaneously. The effect, however, is psychological ; and in spite of what we have just now said, rising prices encourage production all the same.

In case of falling prices, the effect is just the reverse. Producers have to sell their products at a price lower than what they estimated, while wages continue to be high in spite of falling prices. The result is that the margin of profits narrows down with the inevitable consequence that business is depressed, unemployment increases and, though the consumers gain, a general wave of "bad time" overtakes the country. The burden of debts moreover increases, because the same amount of debt or interest on it, represents a large amount of commodities, and in view of the depressed condition of production, this imposes a heavier burden on the nation and the people.

Debtors thus are placed in an unfavourable position when prices fall ; and conversely when prices rise, creditors lose and debtors

gain for the debt represents a smaller amount of the purchasing power in the control of the debtor.

In modern industry, all trades are connected together, such that, the well being of one trade favourably affects others, while when bad times overtake one trade, it drags down others with it. Hence in times of depression, all the trades are affected unfavourably, while in times of a boom all the trades flourish.

"Trade Depressions" as the present ones, are all marked by a general depression of prices and all the evils that we have noted just now.

It thus seems that all violent fluctuations are evils and even modern fluctuations are not favourable to industrial conditions when they show a downward movement of prices. Price fluctuations, that is, instability of the value of money is the greatest economic drawback of modern times and in spite of the united efforts of the greatest of economists no successful way out has been discovered. The greatest bane of the modern economic structure of society still stares at us with all its horrid forebodings.

As promised before, we shall now discuss the causes of changes in the level of prices and as hinted, we shall mainly concern ourselves with the general causes that affect the value of money directly.

Money like everything else has a value. The value of a unit of money is the amount of commodities that can be purchased by it. The value of money like that of any other article is determined at the point where the supply of money equals the demand for it.

Now the supply of money is equal to the quantity of all forms of exchange-media in circulation. By demand for money, we understand the total quantity of goods to be exchanged for money. We can safely assume that though individually the goods are sold at greatly varying prices, it would not be theoretically faulty, if we consider all goods to be exchanged at the general price level.

Hence if  $M$  = total supply of money

$P$  = general price level

$T$  = total amount of goods exchanged for money,

then obviously  $M = PT$  since total price paid must be equal to the total money in circulation. Thus we get  $P = \frac{M}{T}$ . Now if, as is the case in a society under static conditions,  $T$  is constant because productive articles are in equilibrium, we get :

$P$  varies directly as  $M$ , that is, since  $P$  is the reciprocal of purchasing power, the value of money varies inversely as  $M$ . This leads to the formulation of the famous Quantity Theory in its crudest form. "Every change in the quantity of money in circulation produces,

other things remaining equal, a *directly* proportional change in prices."

We must carefully note the proviso. The totality of goods exchangeable for money must remain constant. This is, however, a bold assumption, for, it is quite probable that with change in the quantity of money, the amount of production may also change with a view to adjusting itself to the change in money amount. Again, the theory is too rigid in assuming that the change in price will be exactly proportional. In point of fact such is not the case. This is due to several factors. Firstly, the presence of economic friction prevents the automatic adjustment of price level to increase in quantity of money. Secondly, a unit of money when changing hands rapidly, is as effective, for the purpose of the theory, as several such units. Thus, we have to take into account the "velocity of circulation" as it is called, in order to determine the effective volume of money in circulation. The "velocity of circulation" however is a term which is more easily understood than defined or calculated. It is only recently that practical methods have been devised to measure it. The effect is that in the above equation M has to be replaced by MV where V is the velocity of circulation.

Thirdly, we have to consider that credit instruments such as cheques, etc., are freely used as money and their use economises the need of money. Again, modern banking methods, by setting off counter claims, supplant the actual movement of money to a great degree. Thus, taking into account the credit instruments ( $M'$  in amount) and their average velocity of circulation ( $V'$ ), we have effective purchasing power in terms of money =  $MV + M'V'$ . Thus  $P = \frac{MV + M'V'}{T}$

which is the famous Fisher-Kemmerer formula for the determination of the value of money or of general price level. It is obvious that in this form there is no necessary relation of proportionality between P and  $MV + M'V'$ . But Fisher and others think that the ratio of  $M'$  to M is fixed, such that, assuming further that V, V' are constant, P again varies directly as M. This however has been vigorously objected to by others.

We have seen that one of the difficulties is that T may change with M. But suppose M increases suddenly then T has not the time to adjust itself so that P will increase. Again when M increases to an enormous amount T cannot increase in proportion, so that again P increases, though not in proportion.

Thus we see that the rule as to proportionality does not hold. But we can formulate the theory with Taussig in this way:

"When the total purchasing power in terms of money increases, such increase is generally followed by a rise in prices." But it is

doubtful whether there is any gain by introducing refinements into this bold statement of the theory.

We shall now see the historical verifications of the theory as enunciated just now. During 1820-49 there was a great fall of prices in England. This was due to the enormous increase of production following the Industrial revolution. We thus see that while  $M$ ,  $M'$ ,  $V$ ,  $V'$  remained constant,  $T$  increased, and naturally  $P$  decreased.

Again, during 1849-74 and 1896-1900, there was rapid rise of prices. During these periods there was no appreciable change in the methods of production, that is,  $T$  remained almost constant. But in the first period, there was a great addition to the supply of gold due to discovery of mines in California and Australia, that is,  $M$  increased enormously ; consequently  $P$  followed.

During 1914-1920 there was an unparalleled rise of prices throughout the world. This was due to two factors. Due to War conditions, production was curtailed so that  $T$  was greatly diminished. Again, huge amounts of war loans were subscribed by the people. The money was often borrowed from banks. Since the war loans were taken by the government, the loan certificates were treated as advances to the government and equivalent to cash. Against these, the Banks increased Credit to the amount of several times the loans. These led to a great increase of  $M'$ . Again, with the money obtained by loans, the government purchased goods so that the purchasing power of the people increased, that is,  $M$  increased. Due to the cumulative effect of these factors  $P$  rose enormously. In case of Germany a different factor, namely, the enormous increase of paper money led to further increase of  $M$  and the loss of confidence in currency led to increase of  $V$ , because everybody being in a panic, hastened to dispose of the money in hand, for there was almost absolute certainty that the purchasing power of money would be less in the next moment than it was at any time before. These additional factors so greatly increased  $M$ ,  $V$  and so  $P$ , that the mark notes became worse than useless.

After 1920 there was a great fillip to production due to return of peace, so that  $T$  increased and  $P$  fell. There was thus a fall in the price level which was accentuated by the policy of the various governments to reduce the amount of paper money in circulation.

Thus we find that though mathematical precision is out of question, the Quantity Theory of Money is verified in its widest enunciation to a sufficient extent. With all its shortcomings, it points out a plausible relation between the amount of purchasing power in circulation and the general level of prices. It points out the fallacy of the

government policy to make profits out of nothing by imprudently multiplying the paper currency. It also points out that the confidence in the currency system must be maintained at all costs or else it will depreciate to nothingness.

## CHAPTER XI

### Credit and Banking

In the proper appreciation of banking business, we shall have to understand what credit is. A bank is a credit institution. In the process of economic evolution, credit economy is coming into prominence. The days of natural economy are past, the stage of money economy is passing away and credit economy is holding the field. In a specialised industrial age it is not to the advantage of the business people to deal with cash in their daily transactions and credit exchange has come into vogue. The popularity and advantages of credit economy are so great that it is held by some economists that the system of credit will in the long run do away with the metallic money.

It is on the strength of credit that business transactions of advanced industrial countries are smoothly carried out and in that sense credit is regarded by some as capital. Industrial progress necessarily develops the system of credit. In the countries where the credit system does not work well, it must be understood that they are in the lower stage of industrial growth. It is true that credit does not create wealth, but it determines by whom that capital shall be employed. Credit is simply the permission to use the capital of the other and, looked at from that point of view, credit, though not an independent agent, is an indirect agent in creating wealth. I borrow capital from you and use that capital for the production of wealth and here credit is an indirect factor of creating wealth. In this way, credit helps production. Had there been no credit mechanism, much capital would have been wasted in unproductive consumption or hoarded, but through the help of credit system, efficient entrepreneurs get capital and employ it more productively. Credit also stimulates the growth of capital as credit institutions offer facilities for investment and accumulation. Credit instruments such as cheques, promissory notes, drafts and bills of exchange are the most convenient means of payment in large sums. They save clumsiness and help business transactions.

Credit system is, of course, of excellent service to the society but it has a few drawbacks. If we borrow for consumption, we feel tempted to be extravagant. It has often been found in actual reality that borrowing for consumption has landed the borrower in difficulty and, as a result, he becomes a ruined man. Similarly, borrowing for production encourages reckless speculation. This game of speculation spells ruin to many business magnates. But, in any large business,

speculation cannot be absolutely done away with. Unless it is restricted within reasonable bounds, the disasters are likely to be devastating.

Now the question is, if credit influences prices in the same way as money does. Credit is purchasing power as money is, but it is not liquidating power to the same extent as money is. Therefore, credit influences prices no doubt, but not to the same extent as money does. A purchase on credit is also a purchase and it thus has the same effect on prices as a purchase with a cash. But in the long run, credit can claim no independent influence on prices as purchases are only complete when credit is liquidated to the fullest extent in money.

As regards the note issue by banks, differences of opinion have come to the front. The upholders of the Currency theory and Bank theory urge that "in issuing bank notes, care should be taken that the amount in circulation should always be the same as the amount of gold would be, provided the notes did not exist". But the advocates of the Banking theory hold "that the only consideration a banker need bear in mind in regulating his issues of note was whether these issues were made in legitimate banking transactions, as opposed to speculative dealings outside the ordinary commercial channels. If the amount of notes issued in this legitimate manner should be greater than that needed by the country, the excess would inevitably be presented for payment." According to the currency theory, notes are perfectly secure as they are backed by a metallic reserve. It is no doubt free from the danger of over-issue but absolutely inelastic and not responsive to demands. The banking theory makes paper currency more elastic no doubt but less secure as it is not free from the danger of over-issue. The best course is to follow the banking theory in a restricted sense. In England, the currency principle prevails whereas in India, the banking principle is acted upon where notes are issued (not by banks) by the Paper Currency Department of the Government of India.

There is a third class of economists who hold with Adam Smith Sir Daniel's view. that labour and not money is the fund which supplies all the necessities and conveniences of life. But labour is to be utilised by nominal money, in the form of silver or gold or paper. They believe that, by issuing paper money, a nation can increase material prosperity. When gold and paper do the same work, the use of gold is useless. They think that, by issuing paper money without gold reserve, industrial regeneration and reconstruction are possible. Sir Daniel Hamilton points out that reliable men and Government paper currency are the two essential things for constructive purposes. "It is the duty," he says, "as well as the business of Government which holds the monopoly of the manufacture of money,

to print and issue as much as may be required for productive and constructive purposes ; otherwise, so far as the great masses of the people are concerned, their life will remain the empty one it is to-day. And be it noted that the money so manufactured and issued is not government money but the money of the people ; that is to say, their labour monetised and turned into solid assets. . . . To regulate the issue of credit money by the output of gold and silver mines situated at the other ends of the earth, is sheer stupidity and bad finance. To say that the people of India should stop growing rice because some wretched mines in South Africa stop raising gold is folly. To regulate the food supply of India by the silver output of Mexico would be a sign of senile decay in the finance department of Government."

A bank is not "an institution for borrowing and lending money : it is a manufactory of credit." The word "credit" means belief and to believe in a man is to trust him. That form of money known as credit is therefore simply trust recorded on paper. Adam Smith is right when he says that the judicious operations of banking by substituting paper in the room of a great part of this gold and silver, enable the country to convert a great part of this dead stock into active and productive stock which produces something to the country.

Capital is only the "nominal" money, labour being the real. Sir Daniel pursues his theory by stating :—

" Money, whether gold or silver or paper, creates nothing. It only sets labour—the real capital—in motion, and helps to distribute the products of labour.

Paper money used productively or constructively, is superior to gold or silver for two reasons ; it is 100 per cent. cheaper than either, and it can be manufactured and issued with perfect safety to the extent required by men who can be trusted to make it good in solid assets, and return it.

It is of equal service in times of war when gold currency, or currency which professes to be based on gold, has, owing to its scarcity, to be discarded as a source of danger to the State, and Government paper currency based not on gold, but on the labour and assets of the people, has to be called in to save the nation from disaster, and did so save the Empire in the great war.

If it is sound finance to manufacture and issue Government paper currency to be blown away in the destructive work of war, it is a thousand times safer and sounder to issue the same currency for the constructive work of peace.

Paper currency issued for productive purposes will draw additional gold and silver into India in payment of her increased exports, and will, therefore, tend to strengthen the paper currency reserve and the foreign exchanges.

India imports from twelve to sixteen crores' worth of sugar every year. If she grows all her own sugar with the help of productive paper currency, her gold and silver imports will increase to a like extent, and so strengthen the currency reserves.

In the same way, if her manufacturing industries are developed by productive paper currency, her gold and silver imports will increase to the extent that her imports of manufactured goods decrease.

The sowing of fertile currency will, therefore, increase the food supply of the people, develop her industries and at the same time provide India with more gold and silver to back her fertile paper and strengthen the foreign exchanges."

Financial stringency cannot therefore be accounted as the cause of slow progress. The currency system of Soviet Russia expanded according to needs. The Soviet State Bank's note issue stands thus :—

	Note Issue.	Total Reserve.	Percentage.
1923	... 235 million rubles.	119 million rubles.	50·9
1924	... 518 „ „	239 „ „	46·1
1925	... 756 „ „	263 „ „	34·7
1926	... 856 „ „	235 „ „	27·4
1927	... 1,026 „ „	268 „ „	26·1
1928	... 1,121 „ „	302 „ „	27

Contrast this with India's currency system which stands irresponsible to needs :—

	Note Issue.	Percentage of Metallic Reserve.
1925	... 189 Crores.	57·17
1926	... 181 „	66·59
1927	... 178 „	78·53
1928	... 183 „	72·99
1929	... 179 „	78·44

and now 94

To secure stability in the value of money, Mr. Keynes suggests—

Mr. Keynes' suggestion. "I make the proposal of separating entirely the gold reserve from the note issue. The volume of

paper money is to be used as an instrument for securing stability of trade, prices and employment; and for this purpose the volume of paper money is to be regulated by a suitable bank rate policy and treasury bill policy and it is not to depend upon the gold reserve. The only employment for gold is as a store of value to be held as a war-chest against emergencies and as a means of rapidly correcting the influence of a temporarily adverse balance of international payment."

Credit, we find, is the fount of all bank business. Banks in loaning trade in credit ; banks in accepting deposits stand on trust ; banks use credit to float promissory notes and get them substituted for the metallic currency, (that is coining its credit). If credit becomes shaky, nothing in the bank remains. If the credit remains unshaken, the issue of paper money can expand. If one bank suffers in credit, there is run on other banks. The interdependence of banks is evident and it is always politic for banks to support one another. The crisis in a bank is often avoided by amalgamation. Bank's money does not remain locked up ; it passes on to the people outside and thus the whole business stands on credit. Prof. Chapman says—" It is very important to understand that most of the money lent by banks goes back into circulation, even the loan which is locked up in building a factory, or laying a line of railway. The gold itself does not become bricks for the factory, and railway embankments and tunnels. The gold is ultimately paid out as salaries, wages, rent, interest and profits, even when it used to buy articles like bricks and steel rails. It is always passed on to persons. So most of the money put into banks gets back into the pockets of the people." The primary duty of a bank is to manufacture credit on which it will stand and thrive.

There is another side of the question. A bank has liabilities to its shareholders ; a bank has also demand liabilities to be paid on demand. To meet the demand liabilities, it has to keep a sufficient reserve in cash or things immediately convertible into cash. This reserve is different from reserve fund, accumulated out of part profits which is a liability of the bank to its shareholders. The liabilities due to shareholders are capital paid up, reserve fund and undivided profits ; and the liabilities due to customers are deposits and notes. The assets due to shareholders are cash in hand and with other banks and money at call and short notice ; assets due to customers are investments, bills discounted, advances, premises, etc. The reserve management in bank is a very delicate affair. The reserve in England and India is a reserve against deposit liabilities and not against note issue. In the U. S., there is law compelling the Federal Reserve banks to keep a reserve of 35 p. c. against deposits and ordinary member banks have to keep smaller reserves. In England and India, there is no such law. England's Central Bank keeps a reserve of about 45 p. c. The common method of protecting a decreasing reserve is to raise the discount and to reduce lending. "The modern bank is the nerve centre of the business world. A shock to its credit at once ramifies throughout the community, and its failure may paralyse enterprises that seem only to be remotely connected with

the particular interests involved. The problem of bank reserves is the one of central importance in the subject of credit." If there is large reserve and small lending business, the profits will be little ; if there is small reserve and large lending business, there is the risk of insolvency. Banks by issuing notes and introducing cheque system economise the use of gold ; that is more convenient than handling gold in any business transaction. Banks by drawing money from thousands make it more productive ; the money would have stayed idle, had there been no banking system. Banks provide capital for large industries ; the banks thereby help the society by providing opportunities for capable businessmen who would have rotted for want of capital. Bank also facilitates foreign trade. Therefore, the social utility of banks is considerable and the need of to-day is the growth of "banking habit" and "banking mind".

In every modern country, there is a strong tendency to have A central bank. a central bank which becomes the centre of the banking system by acting as the banker's bank and also the banker to the Government. The privilege of note issue, management of public debt, working as fiscal agent of the Government, keeping the ultimate reserve of the country, all these are the functions of a Central Bank. It also regulates currency through note issue, regulates credit as banker's bank and through discount rate; co-ordinates currency and credit, holds suitable reserves economically and efficiently and adjusting supply of currency and credit to demand, performs its primary and essential tasks of maintaining stability in the internal value of money (and price) and stability in the external value of money in relation to gold and foreign currencies based on gold.

Britain has a Central Bank in the Bank of England, France in the Bank of France, Germany in the Reichsbank, India in the Imperial Bank, United States in the Federal Reserve Board of Washington, and Australia in the Commonwealth Bank of Australia. The full-fledged Central banks are only the first three, viz., the Bank of England, the Bank of France and the Reichsbank.

The Bank of England is the centre of a vast system of banking including the large joint stock deposit banks, the country banks, the country branches of the London banks, etc. The Federal Reserve Act of 1913 in the U. S. A. has brought about centralisation of reserves for strengthening the banking system against the dangers of foreign crises, centralisation of the note-issue (which is made more flexible) and development of re-discount facilities. There is not one central bank in the United States but a dozen of semi-centralised banks due to local jealousies and fear of vast power. The Imperial Bank of India was established in 1921 by the amalgamation of the

three Presidency banks of Bengal, Bombay and Madras. The Imperial Bank is not a full-fledged central bank because it has not the note issue functions ; it does not hold all the Government balances ; strictly and effectively, it is not the banker's bank. The Imperial Bank acts generally as banker for the Government which has an important voice in its management as the two Managing Governors are appointed by the Government. Within India, the Imperial Bank undertakes deposit, discount, etc. Its commercial business is subject to general restrictions.

Banks perform two functions. They act as agencies for the collection of savings and for investment ; they create a part of the medium of exchange. The two functions are not infrequently separated. A savings bank

Functions of a Bank. has to do with investment only. A commercial bank on the other hand is not concerned with investment, in its accepted sense, but generally supplies an important part of the circulating medium.

A savings bank accepts deposit, *i.e.*, receives sums of money and promises to repay them. This promise of repayment is however qualified by conditions requiring the depositor to give proper notice before actual withdrawal. The depositor, it should be noted, gets interest on the deposit.

The bank in its turn lends the money deposited to its care, to persons who mean to use it in effective investment, *i.e.*, to persons who are engaged in the creation of capital. Many of us are familiar with the Government postal savings banks which carry on precisely the same functions as ordinary savings banks, the difference being that in the case of Postal savings bank the deposited money is employed more in the purchase of Government Securities than in the creation of real capital, which, as we have pointed out, is invariably the concern of ordinary savings banks.

But these operations have very little direct effect on monetary questions which are mainly associated with the operations of what are known as commercial banks, which do not undertake to finance industries and thus to lock up the money for indefinite periods of time but which lend on short time to the active business and mercantile community. Such banks receive deposits but primarily for the convenience of the depositor, with an obligation to pay at any time on demand. In many cases such banks also issue notes. By their use of notes and deposits they affect greatly the medium of exchange.

The function of note issue is not exercised by many banks. The Note issue. privilege of note issue is restricted to certain banks known as the banks of issue.

Note issue is a simple operation. A bank note is a promise "to pay a specified sum to the bearer on demand. In law, it is like any other promissory note, payable to bearer. Title to it passes by delivery. If the bank issuing it is well known, the note may continue in circulation and this performs the essential functions of money, even though it may not be accepted in discharge of legal obligation (*i. e.*, even though it is not legal tender).

In modern times specially in the advanced countries, notes do not stand alone. There are the deposits, which are Deposits.

gaining in greater importance in these days. Indeed deposits constitute the main source from which a modern bank gets the capital for carrying on its operations. The bank borrows money from the public in the shape of deposits on which it pays interest. It then lends the money so borrowed to the business community at a higher rate of interest. The reader may ask " how can the bank lend the deposited money to others ?" The bank can do so, because all depositors do not withdraw all their deposits from the bank at the same time and so the bank can safely lend a portion of these deposits. How much the bank can lend depends upon the extent of withdrawals that are normally made by the public. If in a country, it is only 30 per cent. of the deposits that are normally withdrawn, the bank can then lend a portion of the deposit, not exceeding 70 per cent. of the total deposits and with the balance of 30 per cent. can meet the normal withdrawals.

The reserve of cash, which the bank has to keep in order to meet demands for withdrawals by the depositors, is called the banking reserve. In different countries this varies from 5 per cent. to as high as 35 per cent. of the deposits.

The bank makes a profit by borrowing its deposits at a low rate of interest and lending them at a higher rate.

The deposits may be either (1) cash deposits as described above, (2) and also credit deposits created by banks.

Credit deposits, that is, the deposits which are created by the banks, constitute the larger part of the deposit in the commercial banks.

Let us see the manner in which the credit deposits are created. The common and typical operation is that of the discount of a note. The borrower brings to the bank his promissory note signed by himself and endorsed by one or more other persons and if his credit is good, the bank credits him with a "deposit" of the amount of his note, less the agreed amount of interest. Now the borrower has the right to draw on the bank as if he has actually deposited the money. After the period of the loan is over, the bank will recover from the borrower the amount lent.

A commercial bank cannot lend its money for long periods, as it  
may be called upon to refund its deposits at short  
Discount. notice and so it can lend only for short periods.

A commercial bank makes these short period loans by discounting (*a*) the promissory notes of businessmen (*b*) also by discounting bills of exchange. Nowadays goods are sold on credit, and the manufacturer or the merchant, as the case may be, draws his bills of exchange (representing the value of the goods sold) on the purchaser ; then the seller goes to a bank and by discounting (*i. e.*, deducting by way of interest) the bill gets its present value, leaving the bank to realise the bill, when it matures.

## CHAPTER XII

### International Trade

The theory of international trade, admittedly forms one of the most complicated branches of economics. The first difficulty that confronts the student is in the conception of a distinct and separate formulation of the theory of international trade as distinct from the theory of Home Trade. It is necessary therefore, at the very outset, to point out the reasons for this independent and distinct formulation. The student should clearly realise at this stage that the differences between home and foreign trade do not lie in the cost of transport. The cost of transport constitutes as much a factor in home trade as in international trade. The cost of transport in the home trade between Calcutta and Bombay is considerably greater than that in the foreign trade between Rangoon and Singapore. The fundamental distinction between the theory of international trade and that of home trade, consists in the fact that labour and capital flow much less readily between country and country than between different parts of the same country. The mobility of labour and capital that exists, at least in the long run, as between the different industries in the same country, causes things produced in different industries in Home Trade, to exchange for one another in proportion to their real cost of production. For instance, if the supply of any article produced in a country becomes smaller than the demand for it, the articles will be sold at a price much higher than its cost of production. The effect of this will be a rise in the wages and profits in that industry. This rise will tend to attract labour and capital until wages and profits in that industry come down to the normal level again and the thing sells for what it costs, when wages and profits are normal. But in the international trade, on the other hand, labour and capital do not flow from one country to another with any appreciable readiness. The result of this comparative immobility of labour and capital is that things do not exchange, in foreign trade, in proportion to their real costs of production. The student should note that the costs mentioned in this connection, refer to real costs, *i.e.*, costs in terms of efforts and sacrifices, and not to money costs, because, except in certain cases (*e. g.*, in the presence of tariff changes), things do exchange in proportion to their money costs. But these money costs may represent different real costs, because of the fact that the levels of incomes as between the countries may be different. Thus it is seen that the differences between the theory of home values and that of international values lie not in cost of transport but in the comparative immobility of labour and capital as between different countries in foreign trade.

## WHY IS THERE IMMOBILITY OF LABOUR AND CAPITAL?

It may be asked why it is that labour and capital do not flow from one country to another. As regards immobility of labour, it may be pointed out that emigration to foreign lands for slight or considerable pecuniary gain is undertaken by workmen only on rare occasions. It is after all human instinct to stay in the midst of one's kith and kin, in spite of better prospects in foreign lands. Moreover, settling in a foreign land raises a problem of its own—the difference of manners, language and habits of living—and similar other considerations which are inherent in any idea of settling abroad—all these stand in the way of mobility of labour as between one country and another.

As regards immobility of capital, it may be observed that, internationally though capital is not so immobile as labour, yet comparatively it is so. Many persons would not like to invest their capital in foreign companies carrying on business in foreign lands governed by foreign governments under different laws and customs. The question of human instinct is almost as important in the matter of immobility of capital as that of labour. But as has already been hinted, investment in certain foreign public funds and in what are known as international securities, is fairly popular. So that such investments serve to a small extent as "international reservoirs of capital". The result of this turns out to be that the industries of a country are helped, indirectly at least, by international flow of capital which have of late been receiving fillip, by reason of increase of opportunities for international intercourse, and mutual understanding through spread of education and information and facilities for communication and also through fostering of mutual habits of trust, confidence and credit as between nations.

## THEORY OF INTERNATIONAL TRADE

The essential condition for existence of international trade has been stated by Cairnes as follows :—

"The one condition at once essential to, and also sufficient for, the existence of international trade is a difference in the comparative, as contradistinguished from the absolute, cost of producing the commodities exchanged—"

The principle stated is undoubtedly the essential condition regulating international exchange ; but, to obviate misconceptions, we shall try to state the actual scope of the principle.

In a general way, the principle is that nations will not begin trading with one another to any extent unless the comparative values of different things in each of the trading countries differ.

But (1) the comparison referred to, is not of prices but of sacrifices.

(2) Further, comparative cost is the sufficient condition for international exchange—this statement is only true if all those hindrances which arise from cost of carriage and customs duties—are neglected and then only, if the inquiry is confined to two countries.

(3) The costs compared, it should be noted, are the costs in each country of the commodities which are the subjects of exchange, not the different cost of the same commodity in the exchanging countries.

(4) All foreign trade is carried on within the limits set by comparative cost of production.

From the above principles, can be deduced what may seem to be a paradoxical doctrine, that it may be a country's interest to import a commodity which it could nevertheless produce with a less cost than the exporting country. It should not be supposed, however, that all or even the greater part of foreign trade is of this kind.

Let us illustrate our doctrine by supposing that there are only two countries, A and B, that there are two commodities only, flour and cloth, apart from gold which constitutes the medium of exchange; that capital and labour are internationally immobile; that there is no cost of carriage, that all production is subject to constant returns and that both countries have the same kind of money. Let the state of affairs, before the opening of international trade be as follows:—

Country A produces flour at £2 a bushel

Country A produces cloth at £4 a bale

Country B produces flour at £12 a bushel

Country B produces cloth at £24 a bale.

Now if, our doctrine be true, no enduring trade should result when intercourse is opened between countries A and B, because the ratio of £2 to £4 is equal to the ratio of £12 to £24.

Let us see what happens. Country A clearly will, at the first stage, export goods and import nothing but money (gold bullion). The level of prices will therefore rise in country A and fall in country B (*cf.* quantity theory of money in chapter on money). Finally, flour and cloth will cost respectively £7 and £14 in both the countries A and B. Then trade must cease, because neither country would gain by trading as between each other, in either of the commodities. Thus it is seen that if the ratio between costs of production in any two lands are identical, no enduring trade will take place as between them.

## INTERNATIONAL VALUES

We know from the preceding discussion the conditions under which lasting trade will set in as between countries. We have yet

to know its amount and what the rates of international exchange will be. Let it be assumed that there are but two countries, capable of producing two commodities only. Let the countries in question be styled A and B, the commodities  $x$  and  $y$ . It is further assumed, for simplicity's sake, that the principle of constant costs holds in the production of commodities; that there are no impediments to exchange arising from cost of transport and from customs duties. Now let it be granted that a unit of productive power in A can produce  $10x$  or  $20y$  and that a unit of productive power in B can produce  $10x$  or  $15y$ . It follows from the principle of comparative cost that it will be to the interest of both, that A shall confine itself to production of  $y$  and that B shall confine itself to production of  $x$ . The question is what are the terms on which the exchange of  $x$  and  $y$  will take place?

Now when each country directs its resources in the more productive channel, the total production will be  $20x + 40y$ , but if both continue to produce for themselves without any idea of opening trade between each other, the total production will be  $20x + 35y$ . Thus there will be a gain of  $5y$ . What determines the division of this gain between A and B?

Here if A and B were individuals, the ratio of exchange might be anywhere between  $10x$  to  $15y$  and  $20y$ . As Jevons points out, there is a failure of the equation of exchange. There are, however, several circumstances in the case of international exchanges which may modify this failure of the equation. Now, why should the terms of exchange as between individuals be indeterminate? Because the result of the bargain will depend on the comparative amount of information as to each others' position and needs which either party to the transaction may obtain in course of the transaction. In the case of individuals, the comparative urgency of demand is unknown to an outsider. In the case of international exchange, however, the existence of a large number of persons on each side will produce a steady effect—the parties being composed of a large number of persons, the comparative urgencies of demand will come under the law of averages and can within narrow limits be determined.

The foregoing discussion leads to the traditional exposition of the theory of international values which runs as follows: "The ratio of exchange, in the case of commodities, which are the subject of international trade, depends on the comparative intensity of demand on each side, always of course operating within the limits set by comparative cost."\*

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\* In the interest of lucidity of presentation of this complex theory, we have thought it convenient to proceed on lines indicated by Bastable, to whose book on international trade, the student is referred for a fuller treatment of the theory.

We propose to consider now, the advantages of international trade.

International trade is a check on monopolies and the high com-

Advantages of international trade. competition resulting from it will prevent rapid fluctuation of prices. By exports, the nation will bring in foreign money and it will also give a fillip to the nation's industries. Through the magic of interna-

tional trade, the productive efficiency of a nation reaches its acme. If a particular nation has specialised in producing a particular commodity of higher quality at a cheaper cost, it is exportation which can give it the maximum benefit. International trade throws open world-market and the productive efficiency of that particular nation is sure to be increased. Apart from economic gains, international trade brings peoples of different nations having different cultures into intimate touch with one another and this co-mixture of cultures is healthy and exhilarating. It makes human progress possible by broadening human thought, and harmonising human actions. There springs up in this wise a new culture which gives invigorating tone to one's civilisation. Human species, thus bound by common economic interests are likely to settle down to a common programme seeking common welfare. International trade is a recognition of interdependence of human interests. In international trade, the demand of each country is traced to her desire for certain goods from abroad and the supply is due to the facilities for production of the things wherefor there is a demand. Thus demand is effective because it is backed by supply and the supply is active because there is demand. The demand stimulates the supply and the supply creates the demand. The problem of international trade is as much the problem of international demand as that of international supply. Thus we find that international trade is governed by international demand and supply. It is also true as Prof. Marshall puts that "the greater the amount of imports which is pushed on a country's market, the less will be the value measured in her own goods, at which each consignment of them can be marketed : and the more favourable to her will be the terms of interchange : consequently her schedule must show that every increase in the volume of her imports is accompanied by an improvement in her rate of interchange."

In a trade between the poor and rich country, it is the poor country that gains much more than the rich one. The poor country buys things which are absolutely essential and cannot do without them and the rich country buys things which she can easily forego. But in the long run, the rich countries gain most in international trade because it is not the poor country's market only which is open to the rich country. By marshalling her resources and skill, the rich coun-

try can control the world market by variety of things suited to various tastes which poor countries cannot dream of.

The demands of industrially advanced countries for foreign goods are elastic, because "their peoples are enterprising, eager for novelty, quick to adopt any new form of personal expenditure that may promise to yield large satisfaction in proportion to its cost and quicker still to adopt any implement or machine the cost of which has fallen so as to make its use remunerative." Unlike India, Japan is alert and full of independent enterprise. Among the old countries, India, China and Russia are the most backward countries and their demands for foreign goods are inelastic but Russia has recovered from the stupor and has become alert and enterprising; China is recovering and India hopes to recover.

In discussions on international trade there occurs an expression

"Balance of trade" which requires some explanation.  
"Balance of trade" It indicates the relation between imports and exports

of commodities. The statistics of international trade provide an interesting information that the imports and exports of a country are rarely equal. In England, France and other rich countries, the imports of goods exceed the exports and so they are said to have unfavourable balance of trade. In India and Australia, the exports of goods exceed imports, so they are said to have favourable balance of trade. A favourable balance of trade does not necessarily mean prosperity. The expression "balance of account" results from the total credits and debits of the country. Total credits include exports of goods and other things; total debits include imports and other things. India exports more goods to England than it imports, so India is a creditor and England a debtor. England on the other hand, gets a large sum from India in the shape of cost of transportation of goods by ships, etc., interest on her investments, commissions as bankers, etc. India also pays home charges to England. In all these cases, England is a creditor. Thus debits and credits of the country are not confined to exports and imports; they also include freight and insurance, interest on capital invested abroad, bankers' commission and many other things. The goods, monies and services rendered by one country to another will be taken into account to fathom the debits and credits of a country. The obligations and debts of a country are not also to be overlooked. In the long run, the total credits of a country must equal its total debits because every country must pay its debts, but if it does not, unfortunate is the country which fails to do it. Looked at from this standpoint, India is still now unfortunate as the drain on its resources is not being put a stop to. But things would shape themselves favourably in future. Foreign services, goods and money have all their advantages but

for a nation which has passed its infancy and has not attained its full youth, some sort of protection from the chilling blast of international trade is helpful, if not inevitably necessary.

It is therefore not to be contended that disadvantages of inter-

**Disadvantages of international trade.** national trade are nil. Importation of foreign commodities is likely to disorganise domestic industries by displacing labour and capital. The foreign competition has the potentiality of ruining domestic

industries and thereby spreading the contagion of unemployment. International trade also increases the chance of over-production. The mysteries of the world-market could not often be unlocked, and, anticipating market to be favourable, one nation may devote its whole energy to its specialised industry and in course of time it may wake up to find the disastrous effects of over-production. In the year 1930, the Bengal jute-growers intensely suffered from overproduction of jute. There are other drawbacks; the world-market is generally glutinous and the natural resources of a country if greedily swallowed by the world are likely to be exhausted. In an agricultural country, the exportation of food-stuffs and agricultural products would intensify the action of the law of diminishing returns. All these considerations lead one to think that some restrictions on International Trade are necessary. This brings us face to face with the questions of Free trade and protection.

When nations regulate international trade with a view to weaken foreign competition and to encourage domestic industries, the policy is a policy of protection. Taxes imposed on imported goods for the protection of domestic industries are called protective duties and collectively they form a protective tariff. When there are no restrictions on international trade, then there is free trade. Taxes for revenue do not affect free trade.

**Protection.** Protection is desirable because it is in the natural order of things that home-market should be secured to the domestic producers. Foreign markets are distant and precarious. The industries which are conducive to the progress and maintenance of nations require for obvious reasons protection. If foreign competition is shut out, new industries will certainly grow in response to the needs of the country. That would provide for more employment of domestic labour and capital. Protection would thus help the creation of new industries. There are some protectionists who believe that protection would raise wages. If domestic goods are sold at a higher price, surely labourers could be highly paid and this state of things can only be brought by high protective tariff on cheap foreign things. But it does not mean that the wages are not high in the countries enjoying free trade such as England. Protection is absolutely

necessary for infant industries. If they are not protected, they might be swept off by foreign industries which may be fully developed and the infant domestic industries will not be able to stand the forces of competition. Mill rightly says :—“The only case in which on mere principles of political economy protective duties can be defensible is when they are imposed temporarily (specially in a young and rising nation). . . . But the protection should be confined to cases in which there is a good ground of assurance that the industry which it fosters will after a time be able to dispense with it.” Prof. Marshall agrees that there is a valid argument for intervention by the State in favour of nascent manufacturers under particular circumstances of time and place.

Prof. Marshall holds :—“A Protective tax which helps a young industry to develop its latent strength may be in the interest of an undeveloped country, even though the tax must inevitably do some hurt to those few of her industries which are manufacturing for exportation. For the energy developed in a few high-class progressive industries may spread over a great part of the industrial system of the country ; just as an iron screen which concentrates the whole draught of a chimney on a small part of a nascent fire, may generate an intense local heat which spreads and pioneers the way for a broad, strong fire. But neither of these arguments applies to an old manufacturing country.”

List advocates protection as a temporary measure as it has been found that protectionism as a permanent measure is undesirable. Permanent protection does not stimulate industrial progress. Protection may mean that domestic prices will be higher and there is loss to the individuals as consumers but from the standpoint of nations, this individual loss is a gain to all. Protection policy for the preservation of natural resources of a country is always sound. It is the protection that makes a nation stand on its own legs ; it had not to wait for outside supplies. Protection is often resorted to for political gains. That takes the nature of an economic boycott. It is believed that protection promotes nationalism. It is a debatable point but in this industrial age, protection is not a rusty political weapon to fight against the political enemies.

The advocates of free trade are not few in number. Free trade Free Trade. is advantageous to both parties. So says Seligman :—

“ International trade is like internal trade ; the freer it is, the greater are the advantages to both parties. By allowing trade to be absolutely unfettered, everyone is able to buy in the cheapest and to sell in the dearest market, and the gains of all will be at a maximum. Every nation will thus be in a position to develop its natural advantages to the utmost and the world’s wealth will be

increased because of the distribution of productive energies in the most economical fashion." Free trade confers positive advantages on a country. It enables each country to specialise in the industries wherefor it is best fitted; the productive efficiency of every country reaches its maximum as the world-market is thrown open to all. We have observed in the previous pages that the advantages accrued from international trade are manifold. Free trade is international trade without restrictions. The advocates of free trade point out that protection to infant industries is not bad in principle but protection tends to become permanent and in that case the infant industries would always remain infant. Unless there is the exhilarating breath of competition, no industries can grow to their full development. Nursing by protection simply makes them weak and feeble. The case of free trade is further strengthened by the evils of protection. Protection makes production less efficient. By shutting out foreign competition, protection favours monopolies and trusts. Want of competition slackens business enterprise and industrial progress becomes slow. Under a system of protection, the consumers suffer heavily. If the consuming public be extremely poor, protection is highly impolitic. Protection will enrich producers and impoverish consumers and thus the distribution of money becomes uneven and as such unfair. Protection means small business. Without imports and exports, the volume of business does not increase. And without trade, there is no flow of capital which indicates the prosperity of a nation.\*

From the above survey, the only conclusion that one can draw is that neither protection nor free trade is suitable for all nations. Both have uses and it is the state of development of a nation which can justify protection or free trade. The following from the pen of List is illuminating :—"Finally history teaches us how nations may and must modify their systems according to the measure of their own progress ; in the first stage, adopting free trade with more advanced nations as a means of raising themselves from a state of barbarism and of making advances in agriculture ; in the second stage, promoting the growth of manufactures, fisheries, navigation and foreign trade by means of commercial restrictions ; and in the last stage, after reaching the highest degree of wealth and power by gradually reverting to the

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\*\*\* There is indeed some solid foundation for the suggestion that the existence of a very large external trade indicates a high degree of efficiency in industry. For the same energy of character, that makes a nation eminent in industry, is likely to make her traders alert to seize every opportunity of bringing the products in which she excels, to the notice of countries that cannot produce those things with as much relative ease and efficiency as they can other products, which are in demand in her own markets but cannot be produced there with as much ease. The case is specially strong when the exports consist largely of high grade products."—Prof. Marshall.

principle of free trade and of unrestricted competition in the home as well as foreign markets, so that their agriculturists, manufacturers and merchants may be preserved from indolence, and stimulated to retain the supremacy which they have acquired." Free trade is the most suitable between nations situated on a stage of economic equality but free trade between a backward country and an advanced country is profitable for the latter. "The essence of free trade is cosmopolitanism and the essence of protection is nationalism." England has prospered in free trade and the United States and Germany have prospered in protection. Tossed in the two ways Prof. Tausig says:—"The case in favour of free trade has indeed always seemed to me *prima facie* strong; and prolonged investigation and reflection have served to confirm me in this opinion. But it is only a *prima facie* case. There may be offsetting advantages which rebut the presumption." Prof. Marshall as a confirmed believer in free trade puts his case very tersely:—"The simplicity and naturalness of Free Trade—that is the absence of any device—may continue to outweigh the series of different small gains which could be obtained by any manipulation of tariffs, however scientific and astute." Taunting the protective policy in America, he goes on:—"I found that however simple the plan on which a Protective policy started, it was drawn on irresistibly to become intricate; and to lend its chief aid to those industries which were already strong enough to do without it. In becoming intricate, it became corrupt and tended to corrupt general politics. On the whole, I thought that this moral harm far outweighed any small net benefit which it might be capable of conferring on America's industry."

Indian opinion, it should be pointed out, is over-whelmingly protectionist. Their statesmen rightly think that no nation can advance industrially unless there is protection at the initial stage. But they are protectionists with an eye to free trade. Those industries which are infant require to be protected and protection will be withdrawn as soon as possible. There is nothing extraordinary in the claim of Indians for protection. Germany, United States, British Colonies, Japan, etc., are all industrially advanced countries but they are still protectionists. England only talks of and observes Free Trade.\*

\* "The English policy of free trade is not followed by other nations for fear of being invaded by the British goods in domestic markets and for national animosities and also for raising large revenue by protective tariff to tide over national emergencies. The political considerations strengthen the case for protection. Defence as they say is better than opulence. Tariff policy contributes to national welfare."—Prof. Marshall.

But the British opinion is veering round to protection. In the General election in October 27, 1931, the manifestoes of the majority of parties showed that they believed in protection for restoring trade depression and national balances.

The history of the rule of the East India Company in the task of promoting indigenous industries need not be discussed here but even the Government by the Crown are maintaining *Laissez faire* policy (a policy of non-interference). Of late, attempts by the Government are being made here and there to promote indigenous industries but such attempts are not on large-scale. The State-help in the growth of Indian industries is absolutely necessary. The State by not fostering indigenous industries and forcing India to be an agricultural country has made the Indian nation like an "individual with one arm, which is supported by a foreign arm". In the language of List, "in a country devoted to mere raw agriculture, dullness of mind, awkwardness of body, obstinate adherence to old notions, customs, methods and processes, want of culture, of prosperity and of liberty prevail. The spirit of striving for a steady increase in mental and bodily acquirements, of emulation and of liberty, characterise, on the contrary, a state devoted to manufacture and commerce." The Indian industries should be fostered for which a policy of protection is necessary. Wholesale protection is bad in principle; a policy of retaliation is also a dangerous one ; it is only cautious and discriminating protection that is welcome. The Indian fiscal commission have recommended protection for those industries which possess natural advantages or which require guarding in the interest of the trade itself or of the country, or which, if nursed for some time, would be able to face world competition. A Tariff Board has been constituted to recommend the particular industries that require protection and to watch the effects of protective duties. In the scheme of Imperial Preference, India is

*Imperial preference.* having a place, because "among the constituent States of the Empire, she is at once the largest producer of food and raw materials and one of the largest consumers of manufactured products. And potentially, with her 300,000,000 of thrifty, industrious and progressive workers and consumers, she is a commercial unit of greater importance in the world, whether for exports or for imports, than almost any other." The scheme would mean to India that the United Kingdom and the Colonies would give freer entry to Indian tea, coffee, sugar, wheat and all India's staple products and it would also mean that the Indian import duty on a large number of British manufactures would either be abolished or reduced. The advocates of the scheme say that Imperial Preference would stimulate Indian industries and stabilise Indian Finance. But in fact India would not gain so heavily as supposed. India's trade with the Colonies is small. India exports chiefly food stuffs and raw materials and by getting preference for staple products only, India would not be gaining substantially whereas by giving preference to British manufactures, she would cause

harm to her indigenous industries. Fiscal autonomy in the case of India is the best solution and though it is theoretically conceded, its practical application is strewn with obstacles.

## CHAPTER XIII

### The Problems of Exchange

In the modern economic societies, distribution of wealth takes place through exchange. Without exchange, the existing wealth cannot be utilised in full. The productive capacities of individuals and nations have been utilised through exchange. Had there been no exchange, India could not have utilised her jute, Australia her wool, California her gold and so on. Therefore, it comes to this that the progressive development of exchange brings about the development of productive powers of nations. Exchange in this wise contributes to the prosperity of the nation. It is exchange which has helped the progress of the economic organisation. And it is exchange which has made it a complex one. The indispensable organs and instruments of exchange are merchants, means of transport, markets and money. The merchants bring producers and consumers together; means of transport enable the carriage of goods from one place to another for the purpose of exchange; market is necessary for the exchanging work; and money is the medium of exchange.

The expression "foreign exchanges" means many things. Sometimes it means the foreign bills of exchange; it also means the rates of exchange; as Prof. Chapman points out, it means the mechanism of payment in foreign trade. "Foreign exchange means the buying and selling of the money of other countries and is handled in the same way as the buying and selling of most other things. In other words, foreign exchange is the science and art of international money changing."

The bills of exchange are drawn by merchants and manufacturers upon persons to whom they have sold their goods. The drawer of the bill is the person who draws the bill. The creditor to whom the money is owing and the debtor who owes the money is called the drawee. When the debtor signs the bill to signify his acknowledgement of the debt, he is said to accept the bill. When the drawer and the drawee live within the same country, we call it the inland bills of exchange. When the drawer and the drawee live in different countries, we get the foreign bills of exchange. A bill may be payable at sight or after a certain period. It is said to be discounted on being sold to a third person for what it will fetch.

How are rates of exchange between two national currencies fixed?

#### GOLD POINT THEORY

Before the war, the theoretical gold exchange value could be known by the technical term 'mint-par' or the 'par of exchange'. The mint-par or the par of exchange is the rate at which the standard

coin of one country is convertible into that of another country, according to the terms of the respective mint laws. The mint laws of the principal countries of the world prescribe that the standard coin of the country shall, like the sovereign, contain a certain weight of gold, or shall, like the franc, bear a fixed ratio to another coin which contains a certain weight of gold. A comparison of the weight of gold of the two coins gives an equation showing that the weight of gold represented by a certain number of francs, is the same as that contained in a sovereign; in other words, that a number of francs equals a sovereign. This equation is called the mint-par between the two countries. This mint-par is therefore a comparison of the value of the units of two currencies, on the basis not primarily of what they will purchase, but of the amount of gold to which their possession entitles the possessor. It is a comparison of the gold values.

Before the war, actual exchange rates were bound to approximate to the mint-par or the theoretical exchange values, very closely. The actual Anglo-French rate, e.g., varied by only a few centimes on either side of 25·22. Fluctuations of exchange rates on either side of the mint-par were then not only slight but definitely limited in extent. The limits were fixed by two points called the 'gold points'. These points depended upon the cost of sending gold from one country to another and were determined respectively by adding that cost to and subtracting it from the mint par. Thus the mint-par between London and Paris was 25·22, assuming that the cost of sending gold in either direction inclusive of freight, packing and insurance, was '07 francs per sovereign. Then the gold points were—

$$25\cdot22 + .07 = 25\cdot29 \text{ (the upper gold point).}$$

$$25\cdot22 - .07 = 25\cdot15 \text{ (the lower gold point).}$$

The Anglo-French rate ordinarily fluctuates between 25·15 and 25·29 and would not, save in extraordinary circumstances, move outside those limits. The statement that the limits within which the rates of exchange would fluctuate were fixed by adding to, and subtracting from, the mint-par, the cost of shipping gold, is known as the gold point theory.

### PURCHASING POWER PARITY THEORY

Before the war, gold was an international currency and the two assumptions underlying the gold point theory, namely, (a) that a country's currency represents a claim to a certain quantity of gold and (b) that that claim to gold could, if desired, be enforced, were justified. But during and after the war, both these assumptions were only partially true. The result of the failure (due mainly to inflated paper currencies of the convertible type and prohibition of the export

of gold) during the post-war years, of the above two assumptions on which the gold point theory is based and of their partial and limited restoration in 1924-25 is that the gold point theory has to yield place to a new theory called the purchasing power parity theory.

The exchange fluctuations of inflated currencies present quite a different problem from those of pre-war days. They can no longer be correlated to mint-par which assumes convertibility into gold. Post-war exchanges tended to move about a new par called the purchasing power parity.\* The old mint par was obtained by comparing the amounts of gold which the two standard coins represented. The new purchasing power parity is obtained by comparing prices in the two countries in question. We find that in the autumn of 1922, a certain block of commodities, could, after making certain allowances, be purchased in England for so many pounds and in Germany for so many paper marks. The division of that number of paper marks by the corresponding number of pounds gives as quotient a figure which represents the number of paper marks which a pound is worth in terms of purchasing power. Purchasing power parity thus gives the exchange value of one currency in terms of another by means of an equation based on prices ruling in the two countries in question, for certain kinds of goods. Mint-par was a comparison of quantities of gold, and purchasing power parity is a comparison of certain kinds of commodity prices.

So far, everything is straightforward enough. The difficulties occur in determining the two price levels to be compared. It will have been observed that in describing these price levels we make use of qualifications, *viz.*, (*a*) that the price levels in question were those of "certain kinds" of goods and (*b*) that, these prices were to be compared after making certain allowances. As regards (*a*), the price levels compared are not the general price levels of the two countries but the price levels in those countries of the goods entering into international trade. As regards (*b*), in calculating the price level of the goods entering into international trade, allowance has to be made for freights, customs duties and import and export prohibitions and regulations.

When a country imports much and exports little, it will find itself in a difficult position to discharge its indebtedness to other countries. It has then no option but

*Methods of dealing with foreign drains of gold.* to pay in gold if its creditors will not wait. Bullion is the sole international money but there are three courses of action open to deal with the foreign drains of gold :—

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Ref.—Cassel—"Money and Exchange after 1914"—pp. 137-46.

Keynes—"Tract on monetary reform"—pp. 87-106.

I. It may put difficulties in the way of those who need gold, that is to say, it may temporarily decline to deliver gold on demand, unless a customer can prove an unavoidable need for gold.

II. It may offer to buy gold at more than its market value until the strain is over.

III. It may raise the bank rate, that is the rate at which it lends money and discounts bills.

Raising the bank rate checks the drain, because, firstly, the discounting of bills becomes costly and the holders of Bank rate manipulation. maturing bills will retain them till maturity, instead

of getting them discounted ; secondly, high bank rate attracts gold because a country with a high bank rate is a profitable market for investment; thirdly, borrowing is discouraged by the heavy cost of borrowing and "when less accommodation is sought from banks, there is less money to circulate and prices in the country consequently tend to fall. When home prices fall, the country becomes a better market to buy in but a worse market to sell in ; consequently exports are stimulated and imports are checked."

The stabilisation of international exchanges is desired by all and Stabilisation of international exchange. it has been seen that the restoration of gold standard is the best. Though the war overthrew gold standard in all European countries, the return to it is

being advocated by the economists. Gold standard has also been established and re-established in the United States, United Kingdom\*, France, etc. It has been found that gold is the best exchange standard and it is also found that gold is the ideal standard for internal currency. A gold currency system is necessary to the economic prosperity of the country because stability in the internal value of money within a country helps to secure external stability and it is gold that can bring about stability as "a good medium of exchange, a good measure of value and a good standard of deferred payments." The economists fear shortage of gold. But there has been an increase in the production of gold for the opening up of new mines in Australia, in South Africa, the United States and Alaska and there have also been great improvements in the mining methods. The adoption of gold standard may be resorted to without any anxiety and the shortage of gold is not to be anticipated in future.

In this connection it would be interesting to note that Mr. J. F. Darling, a director of the Midland Bank, said that the cause of the unexampled economic crisis in the year 1930-31 was the artificial value of gold and silver and its remedy was to restore the equilibrium by raising the price of grotesquely undervalued silver by backing it with gold. He further said :—" Unless we can raise the

\* Britain has been off gold standard in the year 1931.

standard of Asia, the East will inevitably drag our standard of living down. The most effective way to raise the standard of the East is to restore silver to its rightful and time-honoured position as the co-equal of gold at a given ratio in the money of the world."

If the above remedy is followed, certainly it would benefit India and also the producers of silver in North and South America. When the fact is that silver is not in equal position with the gold in the money of the world, the Indian economists claim gold standard for India. Gold exchange standard which India is enjoying without gold standard is ruinous for India. India was a silver standard country till 1893 but a fall in the value of the rupee caused serious embarrassment to the Government of India. In accordance with the recommendations of the Herschell Committee, the coinage Act of 1893 provided for closing of Indian Mint to the free coinage of both gold and silver, the Government retaining the power to coin rupees on its own account. Since then, the Fowler Committee definitely advocated gold standard for India. The Fowler Committee stated :—

"We concur with the Government of India in their decision not to revert to the Silver Standard . . . . Over four-fifths of the foreign trade of India is with

Gold Standard countries, and for this reason it is desirable that India should have the same measure of value as those countries . . . . A further and certainly not less important consideration for a country like India is that an established Gold Standard is the simplest and most effective means of attracting capital . . . . We are in favour of making the British sovereign a legal tender and a current coin in India. We also consider that, at the same time, the Indian mints should be thrown open to the unrestricted coinage of gold on terms and conditions such as govern the three Australian branches of the Royal Mint. The result would be that, under identical conditions, the sovereign would be coined and would circulate both at home and in India . . . . Under an effective Gold Standard rupees would be token coins, subsidiary to the sovereign. But existing conditions in India do not warrant the imposition of a limit on the amount for which they should constitute a legal tender . . . . In conclusion, we desire to record our opinion that the effective establishment of a Gold Standard is of paramount importance to the material interests of India. Not only will stability of exchange with the great commercial countries of the world tend to promote her existing trade, but also there is every reason to anticipate that with the growth of a confidence in a stable exchange, capital will be encouraged to flow freely into India for the further development of her great natural resources. For the speedy attainment of the object, it is eminently desirable that the Government of India should husband the resources

at their command, exercise a resolute economy, and restrict the growth of the gold obligations . . . .”

Gold standard is necessary because it is impossible for men of Gold Standard. business to feel any confidence in the future value of the rupee and this want of confidence restricts the investment of capital and hampers legitimate enterprise. The Government of India approved of the recommendations of the Fowler Committee but for mysterious reasons those recommendations were not given effect to and India began to enjoy gold exchange standard without gold currency. The adoption of gold standard in its entirety is suitable for India because, first, gold is a more convenient and portable medium of circulation than the rupee ; secondly, gold currency is a necessary step towards the ideal paper currency, backed by gold in reserve ; thirdly, there is prestige in gold currency which supposes a progressive State ; fourthly, until India has a gold currency, she will continue to have artificial and managed currency ; fifthly, India should be encouraged to absorb gold in order to protect the world from a further rise of prices due to the greatly increased production of gold. The advocates of gold currency suggest the establishment of a gold Mint in India. An effective gold standard implies that all values are to be measured in terms of a standard unit of gold defined by law and that all other media of exchange which are in use are ultimately convertible into the standard coin. The ultimate convertibility of all substitutes into the standard coins requires “free and open mints and a reserve of gold readily available for converting all media of exchange into the standard currency for internal purposes and for shipment abroad in case of external liabilities ”. The Brussels Monetary Conference of 1920 unanimously recommended that it was highly desirable that the countries that had lapsed from an effective gold standard should return to it.

Indian currency and exchange have been subjected to a series Indian currency and exchange. of experiments as a result of which the capital resources of the country have been dried up and the gold balances deprived of. The importance of the currency system in the economic life of the body-politic cannot be over-estimated. It is a truism that the economic prosperity of the country depends on the purchasing power of the people. The purchasing power of the people is no doubt influenced by the monetary system of the country. The Indian currency has a romantic history of its own.

Prof. Keynes in his “ Indian Currency and Finance ” supported Gold exchange standard because the avowed objective of a sound currency must be to secure the fixity of foreign exchanges and to provide facilities for payment of foreign debt. But it has been found and

even admitted by Prof. Keynes that the stability of exchange is in the nature of a convenience to those who are engaged in foreign trade. Gold exchange standard may secure stability of foreign exchanges but stability in the internal level of prices is no less an important thing. Therefore the Gold exchange standard is not a sound monetary system because it makes internal currency inconvertible and produces instability in the internal level of prices through overissue and inflation.

The evils of Gold exchange standard in India are many. Firstly, the gold exchange standard reduces the rupee into the position of an inconvertible note printed on silver and the inconvertible fiat money has always the danger of over-issue. The rupee currency has difficulties : it admits of expansion and not contraction : the value of the rupee being arbitrary, it is not hoarded ; it is no coin for export. Secondly, the gold exchange standard in India has made currency inelastic ; it does not respond to the needs of the market. The fluctuations in the bank rate are sufficient indexes of the inelasticity. Thirdly, the gold exchange standard only profits those engaged in foreign trade.

The only sound monetary policy in India is the introduction of gold standard and currency. If the market for gold become free, if the import and export of the metal become free, the amounts hoarded or kept back in India would be released for circulation. The need of India is capital and with the gold standard, India would secure capital and credit, whereby the industrial life could be built anew with added prosperity to India and to the world at large. Unless the purchasing power of the Indian people is increased, the stagnation of trade in Great Britain and the World has no hope of recovery. The economic enterprise in India shall have to be encouraged and that can be done by gold standard. As late as May 1924, the Under-Secretary of State for India observed in the House of Commons :—“While effective restoration of gold standard was the objective of the Government policy, economic conditions throughout the world had not yet reached the degree of normality which would justify at present an attempt to stabilise the gold value of the rupee.” India has a favourable balance of trade ; India’s food produce and raw materials are in great demand ; and by her position as a creditor country, India can command more gold necessary for the establishment of gold standard. Gold standard is vital to India’s prosperity.

## CHAPTER XIV

### Public Finance

The State has many functions to perform and has necessarily to incur heavy expenses therefor. To meet those expenditures, the State has to raise revenues and administer them. Public finance deals with the revenues and expenditures of the Governments. Carl Plehm defines public finance as "the science which deals with the activity of the statesman in detaining and applying the material means necessary for fulfilling the proper functions of the State." The functions of the State are varied, especially when the State is usurping many of the functions of the private individuals. Modern State is extending its influence in every department of human activity which we may call State-Socialism. It is not only war and peace that troubles the State; even sanitation and education are their concerns.\* So public expenditures are huge and an enormous amount of revenues has to be raised for meeting them. They are always increasing, and the importance of public finance cannot in any way be ignored. The expenditures and revenues of the State go on increasing and their administration turns out to be a complex system. Public expenditures are always on the increase. Prof. Ely rightly says :—

"Comparisons between different countries and different periods show regularly among progressive nations an extension of public activities. This manifests itself extensively and intensively; the State and its subordinate political units continually undertake new functions and they perform their duties, old and new, better and better.

In this way, that is through public agency, the needs of the population to an increasing extent, specially their common needs, are satisfied; and the public services for satisfaction of needs continually improve in quality. The clear proof of this is given statistically in the increased demands made by the States and the subordinate political units."

The individual and the State have each receipts and expenditures. But there are distinctive features of public finance which render a separate examination necessary. Prof. Bastable catalogues them in the following way :—The first point in public economy is its compulsory character. The State is independent so far as legal restraints are concerned. It is entitled to claim all the serivces and property of its

\*Bentham declares emphatically—"The admitted functions of Government embrace a much wider scope than can easily be included within the ringfence of any restrictive definition and that is hardly possible to find any ground of justification common to them all except the comprehensive one of general expediency."

subjects for the accomplishment of whatever aims it prescribes to itself. A second point of difference appears in the ends to be attained through State agencies. They are mainly: the protection of the society against aggression or internal disturbance and the promotion of progress in civilisation. The force of the State must prescribe what is to be paid by its subjects as a body and the share that shall be borne by each. The third feature is the existence of special interests opposed to the general welfare. A fourth point is in the determination of the area of work for each. An individual will adopt the most profitable employment to him but the field of State action has to be mapped on different grounds: the State would also have to manage unprofitable business. Even in the object of working, a private economy differs from that of the State. An individual works for surplus whereas the ideal of State economy is to establish a balance between receipts and expenditure. A State that has very large surpluses is as ill-managed as one with large deficits. The private person must regulate his expenditure by his income whereas the State regulates its income by its expenditure.

For the sake of clearness, the subject can be split up into four divisions:—(1) Public Expenditures, (2) Public Revenues, (3) Public Debts, (4) Financial Administration.

## PUBLIC EXPENDITURES

The fundamental concept of public expenditures is general welfare. They can have no justification, if welfare be not the objective. It is quite a different proposition if the State should extend its activities and meddle in individual lives thereby increasing the public expenditure and complicating their administration. Idealists have been found to differ if the State should do everything for the people or it should only make or see the people fit for doing everything in their own interest. But the tendency of the modern State is towards State Socialism and its activities are increasing at a rate which is depleting Government treasury and landing them in debt. Therefore, in connection with public expenditures, it should be remembered that they should not be such as to necessitate imposition of heavy burdens on the peoples; they should be economical and avoid waste and whims of the authorities; they should be responsive to the needs of the people; they should be under proper and well-organised check and should on no account be immune from public criticism. The State outlay is normal or abnormal. The usual expenditure on military and naval forces, the cost of justice and education, is normal whereas the cost of war or expenditure for any sudden emergency is abnormal. Borrowing for extraordinary expenditure is supported on the ground

that it is in substance a creation or investment of capital which is an asset to be placed against the new liability.

Adam Smith separates the State outlay into productive and unproductive outlay. But the best way is to divide the expenditure into economic and non-economic expenditure.

In settling the proper proportion of public expenditure, different elements are to be taken into account such as the purpose of outlay, the amount of national income and the distribution and forms of wealth. If the purpose has an economic end, a larger amount may be expended. If the amount of national income be greater, expenditure upto a certain percentage would not be burdensome.

Larger outlays beyond the receipts from the property of the State are attributable to the following causes, *viz.*, the cost of war and preparation for war, the extension of administrative action necessitating a large staff of competent officials and the progress of democracy wherefor the expenses of the State are increased under the influence of socialistic ideas. "The new radicalism is not desirous of economy in expenditure and it may be conceded that democratic finance is remarkable for its disregard of principles and its utter incapacity to measure financial forces." It is contended by the critics of Socialism that large outlay even for the benefit of the poor has no rational basis inasmuch as the receipts of the State come principally from the rich. Providing amenities for the poorer classes at the expense of the rich with an eye to increase the popularity of the Government is resented by the capitalists. But to oppose extension of amenities and to criticise the Socialists for gambling with the rich men's money is and can be interpreted as a narrow conception of citizenship.

When the State spends for developing the natural resources of the country or human resources of the nation, that is productive expenditure. But expenses on wars, armaments, etc., are all unproductive expenditures. The rules applicable to the treatment of abnormal outlay for other than economic purposes have been thus stated by an eminent economist:—(1) Expenditure should, as far as possible, be met out of the annual receipts and therefore increased outlay should be balanced by heavier taxation. (2) In the case of non-recurrent expense of large amount, a loan is preferable to a serious disturbance of the normal tax-system and may fairly be employed. (3) Where the abnormal expenditure extends over a series of years, the various forms of taxation should be adjusted to meet it. (4) This general principle, however, fails where either (a) it would be impossible to secure an equitable division of the heavy taxation necessary, or (b) where the limit of productiveness with regard to the several taxes would have to be exceeded, or (c) where for political reasons it is in-

expedient to press heavily on the taxpayers. Under any of these conditions, resort to loan as a supplement to the tax revenue even for a somewhat lengthened period is defensible.

Public expenditures are classified under different heads and are earmarked for different objects. Mill classifies public wants into necessary and optional wants. Roscher suggests necessary, useful and superfluous expenditure corresponding to the necessaries, decencies and luxuries of individual consumption.

### PUBLIC REVENUES

For meeting public expenditures, public revenues are necessary. Public revenues may be classified in the following manner :—  
 (1) Extraordinary revenues consisting of public loans ; (2) ordinary revenues from Government ownership, public domains (such as land, forests, mines, etc.), public industries, (such as Post Office, Railway), interest and investment from the incomes of private persons and Corporations in the form of fees, specially assessments and taxes ;  
 (3) Miscellaneous revenues.

In all progressive modern nations, taxation is the most important source of public revenues. A tax is a compulsory contribution and it is a payment for special benefits received from the State. In India, half of her public revenues is derived from non-tax sources because in a poor country, heavy taxation is not possible.

Taxation must be guided by certain principles. Firstly, taxes must be sufficient for discharging the functions of the State, that is the principle of sufficiency. Secondly,

it has been held that equity should also be a factor in determining taxation and on this point, economists and financiers have agreed to differ. What would be equity in taxation ? The general opinion is that the people should be taxed in proportion to their ability to contribute. The word "ability" is equally shrouded in vagueness. Prof. Cannan holds that of the two principles, Equity and Economy, the former is ultimately the weaker ; economic interests should not be disturbed on the plea of equity. Thirdly, the principle of economy is advocated ; the taxes whose cost of collection is small are most suitable. Taxes which would injuriously affect production and consumption are not to be supported. Fourthly, there should be the principle of clearness in taxes, that means, people should have a clear idea of the "what", "when" and "why" of the thing. What they have to pay ? When they have to pay ? Why they have to pay ?

Fifthly, the tax system should be elastic so that the revenue may be increased within reasonable time by reasonably increasing the rates. Sixthly, the principle of variety should be observed because taxes in various kinds neutralise the defects of one another.

The principles of clearness, of elasticity and of variety are advocated with a view to secure equity in the matter of taxation; therefore, the fundamental canons of taxation are the principles of equity, sufficiency and economy. If the canons conflict with one another, the less important one should be surrendered.

Adam Smith's celebrated canons of taxation at one time exercised great influence:—The canon of ability, the canon of certainty, the canon of convenience, and the canon of economy. The canon of ability corresponds to the modern canon of equity. The canons of certainty, convenience and economy correspond to the modern principles of clearness and economy.

Sir Josiah Stamp has looked at taxation questions from different standpoints, *viz.*, (1) from the individual point of view, (2) from the Government point of view and (3) from the standpoint of economic society.

According to Prof. Bastable, the main distribution (of taxes) is into primary and secondary taxes. The primary taxes comprise those on land, on business and capital, on persons and on labourers' earnings. The secondary forms are taxes on commodities, taxes on communication and transport, the remaining taxes on commerce and legal transactions, taxes on transfer of property and succession duties.

Taxation means the subtraction of so much wealth from individual enjoyment or use. But some people urge that taxes are good investments. If a tax is an investment, the argument may be carried further and it may be said that overtaxation\* means the growth of wealth and it will certainly stimulate enterprise and invention. But wise Government would never increase taxation indefinitely because the process of creating fresh wealth by simply taking it from the producers will create discontent and is evidently injudicious.

Sismondi asserts that every tax should fall on revenue, not on capital; that in the assessment of taxation, gross produce should not be confounded with revenue; that taxation should never touch what is necessary for the existence of the contributor; and that taxation should not put to flight the wealth which it strikes.

The principles of taxation are divided into four classes,\* *viz.*, (a) financial, (b) economic, (c) ethical and (d) administrative. Under (a) taxation should be adequate to meet expenditure and it should be elastic; under (b) the sources of taxation should be rightly chosen and the kinds of taxes should be selected with reference to their effects; class (c) includes that taxation should be general and it should be proportional and under class (d) that taxation should be determinate, convenient and collected with the smallest cost.

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\* Wagner holds this view.

From the analysis of the principles of taxation, the question that What is an ideal tax? comes to the front is what is an ideal tax. It is a question of absorbing interest but an agreed principle

has not been arrived at. People have different notions of equity which have been brought to bear on the discussion. Their disagreement simply shows how different human species are in psychological outlook.

If the people are taxed in proportion to the benefit they receive from the State, that is called the benefit theory of Benefit theory. taxes. The benefit theory attempts to secure justice in the matter of taxation. But it is open to serious objections. The poor receive the greatest benefit from the Government. If this theory is maintained, they are to be more taxed which is at once unjust and immoral. Moreover, taxation in proportion to the benefits is an impracticable proposition.

Some maintain that taxation to be just should mean equal Sacrifice theory. sacrifice among the taxpayers. That is called the equal sacrifice theory.

Many economists hold that an ideal tax is a tax on faculty. It is Faculty theory. quite a reasonable proposition that men should be taxed in proportion to their ability. But the problem is: how is ability to be measured. This is a very confronting one. The best way to measure ability is to find out one's income on which taxes should be levied. In this connection we are to note the meaning of proportional taxation and progressive taxation. When the rate of taxation remains the same for all incomes, we get proportional taxation. If there is a proportional tax of 2 per cent. on incomes, then an income of Rs. 400 would pay Rs. 8, an income of Rs. 500 would pay Rs. 10 and so on. When the rate of taxation increases as the income increases, we have progressive or graduated taxation. That means that there is 2 per cent. for Rs. 400, 3 per cent. for Rs. 600, 4 per cent. for Rs. 800 and so on. The question that presents itself is which is better. There is room for better and keener sense of justice in the principle of progressive taxation. It is quite natural that one's ability will increase with the increase of his income. It is only equitable that the rate of taxation should be higher on larger incomes. Larger incomes have greater potentialities of production. Progressive taxation is supported on the strength that the surplus money can cheerfully bear the burden of heavy taxation. Progressive taxation is roughly a taxation of surplus. Moreover, it is an instrument for social improvement. Unless the rich are taxed heavily, there is no chance for any ameliorative work. It will not hit the rich but would broadcast welfare among the people.

Critics maintain that progressive taxation would disturb the existing arrangement; even conceding that the existing arrangement is defective, there are other ways of remedying it. Moreover, progressive taxation would check the accumulation of wealth and would thereby hamper production of wealth within the country. There are administrative difficulties in progressive taxation. All these objections do not stand any close scrutiny. It is no doubt equitable that progressive taxation should be resorted to but a heavy and reckless dose would be unjust and setting bad examples. That would antagonise the rich, check the growth of capital, and obstruct industrial progress by chilling the enthusiasm and activities of the industrial magnates. Progressive taxation is a triumph for socialistic principles. Prof. Bastable holds that the successful administration of the State is the final object and therefore, convenience or even equity may have to yield to productiveness. That is, according to him, the *sine qua non* of an ideal tax.

Now we come to the question—direct taxes and indirect taxes.

**Direct and indirect taxes.** If a tax-payer is also a tax-bearer, that is called a case of direct tax. If persons on whom taxes are imposed shift the burden to other persons, that is a case of indirect tax. Direct taxes are more equitable and admit of graduation. The Income tax, Death Duties, etc., are direct taxes. Direct taxes have less chances of evasion and the taxpayer knows "what he has to pay and when and why". Gladstone said—"If you had only direct taxes, you would have economical Government." But it must also be noted that direct taxes are more unpopular as they touch the pocket in a direct way.

Indirect taxes are not unpopular like direct taxes; people do not feel their burden as indirect taxes are paid by men when they spend. Indirect taxes are also elastic and in times of prosperity, they will be more productive without any strain on them. No State can avoid indirect taxes. Without imposing direct taxes on the poor, they should be made to pay indirectly. But the defect is that indirect taxes will fall more on the poor than on the rich but that is inevitable. Indirect taxes will necessarily fall at times of depression. The tendency of the modern age is that the indirect taxes are being replaced by direct taxes. The Indian tax system is clumsy. There is too little direct taxation and the rich do not contribute their just share while there is too much taxation of commodities.

Customs taxes and internal taxes on commodities are some indirect taxes. Customs duties are duties levied upon imported commodities. Customs taxes are of two kinds—protective customs duties and revenue duties. When customs duties are levied upon imported foreign goods with a view to protecting indigenous industry

from foreign competition, that country is said to have protective tariff. Revenue duties are customs duties levied for securing revenue only and the country is said to have a revenue tariff. Customs duties yield large revenue and they are highly elastic; their chief merits are in their stability and cheapness of collection. If duties are levied upon imported goods according to value, they are known as *ad valorem* duties. If they are levied according to other units of measurement such as weight, bulk, etc., they are known as specific duties.

Internal revenue duties are duties imposed on domestic commodities, meant for domestic consumption. They are unpopular no doubt but highly productive.

Taxes on commodities are indirect taxes. Taxes on necessities should be avoided while luxuries should be highly taxed. Food taxes are therefore extremely unpopular and should not in normal circumstances be resorted to. Taxation of raw materials is bad. Import duties and export duties are highly productive.

General property tax, Income tax, Inheritance Tax and death duties are all direct taxes.

Income tax has been introduced in almost all progressive modern nations. The income tax to be just should be graduated and should exempt an amount of minimum income. The American minimum amounts to 1,000 dollars for the bachelors and 2,000 dollars for the married. The English minimum is £ 150 per year for the unmarried and £ 225 per year for the married. The Indian minimum is Rs. 2,000 per year\*. The Simon Commission in their report have recommended to lower the minimum but even the present minimum is not adequate to cover physical necessities. Exemption of small incomes from income tax is appreciated both by economists and statesmen.

The introduction of income tax was prompted by equitable considerations. It is just that people having income above the necessities should contribute to the State for the discharge of its varied and welfare activities. Income tax is elastic and highly productive. The difficulties of administration are nothing compared with the advantages that the State reaps from it. Income tax is unpopular inasmuch as every tax is but it is in no case unfair.

Inheritance taxes are equally just. Those who have should contribute to the State for the welfare of those who have not. That is a human point of view. Inheritance tax to be just must be progressive. It is not a bad idea to introduce inheritance tax in India to alleviate the distress of the poor

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\* The minimum is constantly changing and under the Indian Finance Act of 1931, the minimum of Rs. 1,000 as annual income is subject to tax,

classes to some extent. Those who thrive on unearned income should be made to pay a portion of it.

There are two terms, incidence and impact of a tax, which require clarification. The impact of a tax is upon the person from whom the tax is collected and the incidence upon the person who pays it ultimately. A tax on economic rent cannot be shifted and so the incidence of taxes on pure economic rents falls upon persons who receive rents. The chief factor controlling the incidence and the shifting of taxes is mobility or elasticity of supply and this mobility depends upon the scope of tax. A tax universal in scope cannot be easily shifted.

Taxation is said to be deflected when the pressure is borne in part by the foreigner or avoided altogether. Amortisation of a tax means its capitalisation.

### PUBLIC DEBT

Public Debt is not a thing to be ashamed of. All civilised governments 'boast' of it. Public debt can only be justified if it is contracted for any emergency situation such as war or for any extraordinary public works involving huge outlay. Public debt for meeting ordinary expenditures of the State shows a rotten government, irresponsible and irresponsible. Public debts are necessary and inevitable no doubt but utmost discretion and precaution should be observed before running into debts. A national debt is no creation of wealth; it only gives greater energy to production.

There are different forms of public debts. Floating debt is an advance repayable on demand or within a short time. Floating debt is not judicious because it disturbs the money market and the demand for repayment may be made at a time when the government is financially in a distressing condition. Floating debt, if unavoidable, should be kept within narrow limits. Perpetual debt is the best for the governments; it is repayable at the pleasure of the Government. There is no risk of sudden demand for repayment and the Government will repay when it will suit them.

Public borrowing is a delicate affair and can only be resorted to as the last alternative. Public borrowing is an attempt to conceal from the nation the financial strength of the Government. Taxation instead of borrowing would expose the Government and would declare that their treasury is depleted. Public borrowing is merely a cover into the mysteries of which the general people are unable to penetrate. Moreover, that does not immediately touch them. The existence of public debt helps the richer classes to invest their wealth and increase it. But public loans may also divert capital from productive industries. Ricardo and others have maintained that war expenditure should be maintained from taxation and not from loans,

The conversion of public debt is a very useful process with the governments. Conversion is carried out by offering its creditors the choice of repayment or of new securities at a lower rate of interest. It reduces the Government burden and is not also unfair to the creditors as there is the alternative of repayment. The best time for conversion is when the Government credit is high and a period of prosperity has set in.

When a debt is contracted, it is only desirable that it should be repaid. That increases the Government credit and on future occasions, response to public loans will be good. If the redemption of debt does not go on, the future generations will be burdened with heavy debts and low credit. Repayment may be stopped for some time due to any national crisis but under no account it should be repudiated. Prof. Bastable rightly holds—

"The repudiating State shuts itself out from the future use of credit for the sake of a temporary gain. A national bankruptcy is a bar to any later borrowing unless on ruinous terms. The American 'States' have never recovered the shock that repudiation inflicted on their position as borrowers. The best support to the policy of paying in full is derived from the economic advantage that as reputation for honesty secures in the long run and nations, it must be remembered, have a far greater interest than individuals in paying attention to what happens in the long run."

The Indian National Congress\* is advocating an examination of public debts as in their opinion the Government of India is practically a mortgaged State and an acknowledgment of all the debts would burden the future generations so heavily that all ameliorative activities would have to be postponed for a number of years which the nation cannot wait for. The Soviet Russia of to-day repudiated the public debts of the Czar regime.

The sinking fund is accumulated for the redemption of the debt. For the repayment of the debts for the last Great War, Pigou and others have advocated capital levy. But their critics maintain that such a levy on property would disorganise business and check accumulation.

### FINANCIAL ADMINISTRATION

Financial administration is a very complex system. The formation of a thorough system of audit and account is extremely desirable. The characteristic feature of modern finance is the co-ordination of general and local income and outlay. "The constitutional guarantees for the proper application of outlay and the due and moderate levy of

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\* The unproductive debt of India amounts to only 172 Crores and the Congress claim is that war expenditures for Imperial purposes should be borne by Britain.

taxes, the machinery by which those processes are effectively carried out and finally the agencies by which and the manner in which, the public accounts are prepared and verified, have important effects on both income and outlay."

The national budget which is a statement of the nation's accounts of revenues and expenditures should be prepared annually so that the public opinion may be educated or its pressure may be brought thereon to remedy the defects.

Coming to the question of public finance in India, we find that the revenue of the Government is derived from various sources, *viz.*, the income derived from the possession of State-property such as forests; the profits of commercial undertakings such as post office; incidental gains from administrative departments such as law courts; and taxation. The tax-system of the Indian Government is not unitary, rather it inclines to multiple tax-system. The Government do not professedly accept any current theories of the apportionment of taxation. In general they follow the qualified proportional principle and in special cases, the progressive principle. The chief heads of Indian revenue are:—land revenue, opium, salt, stamps, excise, provincial rates, customs, forest, registration, tributes from Native States, interest, post office, telegraph, mint, receipts by civil departments, miscellaneous receipts, railways, irrigation, other public works and receipts by the military department. The total gross revenue amounts to about 126 crores and the net revenue to about 75 crores.

The chief heads of expenditure are—(1) Debt services, (2) Military services, (3) charge in respect of collection of revenue, (4) salaries and expenses of civil government, (5) Famine Relief and Insurance, (6) Public works expenditure, (7) Miscellaneous civil charges. The national debt of India is divided into "funded and unfunded". The funded debt consists of sterling and Rupee loans and the unfunded of savings bank deposits and deposits of service funds. The public debt in India is large but Mr. Gokhale held that against the public debt, the Government have their railways and irrigation works, their loans and advances to local bodies, Native States and cultivators and their last balances. The Minority Commissioners of the Welby Commission came to an interesting finding that the Indian expenditure was not governed by Indian considerations. The Indian frontier policy is in furtherance of Imperial schemes of trans-frontier territorial expansion. Concessions to the European services in respect of pay, promotion, pension, etc., mean that India exists for the Europeans. It is obvious that more is spent on Imperial purposes and less on provincial purposes; more is spent on the improvement of strategic communications and less on the improvement of the conditions of the

people. From an economic standpoint, home-charges are also a drain on the resources of the country.

The Indian Statutory Commission of which Sir John Simon was the Chairman have approved of the scheme put forward by Sir Walter Layton. Sir Walter recognising the need of the reconstruction of the financial machinery of British India on a federal basis has recommended the separation of the Provincial fund from the Central Budget and with an eye to the equitable distribution of the tax-receipts, he further recommended distribution partly according to origin and partly according to population. His plans are on the whole admirable because there is a sincere attempt to rescue the country from the Meston chaos. The suggestion of Inter-provincial Finance Council is a wholesome one. Sir Walter with a view to increase the revenue of the Government suggested new sources of taxation—tax on agricultural income, lowering the minimum of income tax, Death duty, terminal tax, etc. Before suggesting new taxation proposals, he should have recommended retrenchment in Army estimate, in civil administration, in police expenditure and in Railway administration. Without exploring all these avenues of retrenchment, it is not a sound idea to tax the Indian people more, overtaxed as they are. But in any case if the needs justify taxation, no government should shirk it. Take the case of England ; she is the most overtaxed country in the world. In 1931, Mr. Phillip Snowden, later on Viscount Snowden, pointed out that in 1906 national and local taxation of Great Britain took one-thirteenth of the national income but in 1931 one-third of the national income was taken in rates and taxes leaving only two-thirds for the maintenance of population and the provision of capital and wages for Industry. In 1906, the income tax in Great Britain was a shilling in the pound but in 1931 it was more than five shillings in the pound. In 1931, Great Britain undertook the task of meeting the deficit of £ 170,000,000 by the combined method of retrenchment and taxation. England never shirks to tax herself.

## CHAPTER XV

### The Distribution of the National Income

"Distribution" is the division of the national dividend or national income among the agents of production, *viz.*, land, labour, capital and organisation. Distribution in a modern community is a social process. "The economics of distribution is concerned with the earnings of the several agents of production and the relation of these earnings to one another and to human effort." Distribution has become a complicated affair because "free human beings are not brought upto their work on the same principle as a machine, a horse or a slave. If they were, there would be very little difference between the distribution and the exchange side of value ; for every agent of production would reap a return adequate to cover its own expenses of production with wear-and-tear, etc., at all events after allowance had been made for casual failures to adjust supply to demand. But as it is, our growing power over nature makes her yield an ever larger surplus above necessities ; and this is not absorbed by an unlimited increase of the population."

The earlier economists did not take distribution of the national income to be a serious and complex affair. The Turgot's view.

Physiocrats assumed that there was a natural law of population according to which "the wages of labour were kept at starvation limit". Turgot said :—" In every sort of occupation it must come to pass and in fact it does come to pass, that the wages of the artisan are limited to that which is necessary to procure him a subsistence. He earns no more than his living." They also thought that there was something like a natural rate of profit corresponding in some measure to the natural rate of wages. Adam Smith shows that wages and profits are not fixed by an iron law ; they are determined by the ever-fluctuating conditions of demand and supply. He acknowledges that labour if liberally rewarded increases the industry of the common people and that "a plentiful subsistence increases the bodily strength of the labourer ; and the comfortable hope of bettering his condition and of ending his days perhaps in ease and plenty, animates him to exert that strength to the utmost. Where wages are high, accordingly, we shall always find the workman more active, diligent and expeditious, than where they are low ; in England, for example, than in Scotland ; in the neighbourhood of great towns than in remote country places."

Ricardo also attacks the rigid assumptions of the Physiocrats and Ricardo's view. says :—" It is not to be understood that the natural price of labour estimated in food and necessaries is absolutely fixed and constant . . . . It essentially depends on the

habits and customs of the people." That means, wages are to be governed by the "standard of living". To quote Ricardo again—"The friends of humanity cannot but wish that in all countries the labouring classes should have a taste for comforts and enjoyments and that they should be stimulated by all legal means in their exertions to procure them. There cannot be a better security against a super-abundant population. In those countries where the labouring classes have the fewest wants and are contented with the cheapest food, the people are exposed to the greatest vicissitudes and miseries. They have no place of refuge from calamity ; they cannot seek safety in a lower station ; they are already so low that they cannot fall lower. On any deficiency of the chief article of their subsistence, there are few substitutes of which they can avail themselves and dearth to them is attended with almost all the evils of famine."

The modern economists are all agreed that distribution is determined by demand and supply. Prof. Marshall's view. Prof. Marshall explains by saying—"Every agent of production, land, machinery, skilled labour, unskilled labour, etc., tends

to be applied in production as far as it profitably can be. If employers and other businessmen think that they can get a better result by using a little more of any one agent they will do so. They estimate the net product (that is the net increase of the money value of their total output after allowing for incidental expenses) that will be got by a little more outlay in this direction, or a little more outlay in that; and if they can gain by shifting a little of their outlay from one direction to another, they will do so. Thus, then, the uses of each agent of production are governed by the general conditions of demand in relation to supply; that is, on the one hand, by the urgency of all the uses to which the agent can be put, taken together with the means at the command of those who need it; and, on the other hand, by the available stocks of it. And equality is maintained between its values for each use by the constant tendency to shift it from uses, in which its services are of less value to others in which they are of greater value, in accordance with the principle of substitution."

Prof. Seligman explains the ideology and methodology of distribution when he says:— "Distribution, like production, is a social phenomenon. If everyone consumed what he individually produced, there would be no exchange, no price, no distribution. In production we study the creation of the social income; in distribution we study its division. In the one case we regard it as the national output, in the other as the national dividend. The modern science of economics is due to the efforts to analyse the modern shares in distribution. The study of distribution is primarily a study of the remuneration of the factors of production.

Among them, wages, interest or rents and profits exhaust the entire social income. In modern society, differentiation of functions has proceeded to the extent that different classes control different agents of production. This separation, however, is not rigid. The same man may own land and factories; he may be a workman and stock holder. In the great mass of cases, however, the social class corresponds to a different kind of income and in its broadest aspect the social shares in distribution correspond to the factors of production".

Mill shows that the laws of production are different from the laws of distribution. He says:—"The laws and conditions of Mill's view. of the production of wealth partake of the character of physical truths. There is nothing optional or arbitrary in them . . . . It is not so with the distribution of wealth. This is a matter of human institution solely." But in fact all production is for consumption. "National dividend is convertible with the aggregate of net production and also with the aggregate of consumption. Under ordinary conditions of industry, production and consumption move together; there is no consumption except that for which the way has been prepared by appropriate production; and all production is followed by the consumption for which it was designed. There may indeed be some miscalculation in particular branches of production; and a collapse of commercial credit may fill nearly all warehouses for a time with unsold goods. But such conditions are exceptional."

The socialists are dissatisfied with the present system of distribution. The socialist views. The socialistic systems offer different formulas of distribution, *viz.*, distribution into equal shares ; distribution according to wants ; distribution according to merits ; and distribution according to labour.

"To each an equal share" is an ideal system but the modern complicated organisation of industry makes the ideal an utopian one ; elimination of inequality may be a temporary phase but the very system of industry which exists to-day with all the forces of competition and specialisation will bring in inequalities.

"To each according to his needs" is a vague proposition as needs cannot be standardised nor can they be put forward with precision in each case. Prof. Schmoller rightly points out :—"It is a mistake to make our needs a rule of distributive justice, for our needs have necessarily an egoistic character ; it is labour, merit, acts which alone can serve the human race and furnish a rule of distributive justice."

"To each according to his merits" was advocated by the school of Saint-Simon, an essential creed of which is the abolition of inheritance.

"To each according to his labour" was proclaimed by Marx and Engels. No one would get anything who would not be in a position

to use his labour and this will strike a fatal blow to the idle class and social parasites. This system ignores private property, checks individual saving, negatives the utility of captains of industry.

National income is divided into four shares—Wages, Interest, Rent and Profit.

The wage-problem is a great economic problem relating to man's economic status, prosperity and progress. If Problem of wages. a country can settle the wage-question satisfactorily, it spells happiness for its children. So Brentano says that the wage-question is a question of culture. As days are progressing, this question is assuming more importance. This is a problem governed by economic, political, social and ethical considerations. In industrial countries, most men are wage-earners. In India, the wage-earners do not form a large portion of the population. An average Indian peasant is an independent producer—not a wage-earner. If in industrial countries, you ask a workman what his wages are, perhaps you will hear some such phrase as 15 shillings a week. That is the return for his labour. That is value, as determined by the society, for his labour. Thus we find that wage is the price paid for his labour. There are real wages and nominal wages of labour. In the language of Adam Smith, "the real wages of labour may be said to consist in the quantity of the necessaries and conveniences of life that are given for it (labour); its nominal wages in the quantity of money."

Nominal wages are actual wages paid in money. Real wages are the necessaries and conveniences of life that are given for labour. Therefore, real wages can only give the true economic prosperity of the worker. Wages are different from income. Suppose a labourer works 6 months a year, his wages may be high but his income will be comparatively lower as the worker shall have to live the whole year on that sum. If the individual be an economic unit, his real wages can indicate the economic position of the worker. In calculating real wages of an occupation, we must take into consideration social standing, opportunities of promotion, regularity, independence and attractiveness of a trade.

Labour is paid in many ways—by Time wages, Piece wages and Efficiency wages. When the wages of a person are paid per diem, per mensem or per annum, they constitute his time wages. Where the work is uniform and output can be easily measured, the labourer is paid in proportion to the quantity of work, that is a system of piece work wages. If we pay a labourer in proportion to the ability and efficiency required of the worker, that constitutes efficiency wages.

Wages are of great concern to the employer. Inefficient labour is always an economic loss. The employer will gladly give high wages if labour be efficient as that is paying. Low-waged labour which is inefficient is really dearer as the employer gets a low return. The employer buys labour—not the labourer. So efficient labour is always a paying proposition. In India labour is dear, though the worker is low-waged as in the thermometer of efficiency, their degree is sub-normal.

Labour is not a commodity but it is bought and sold like a Labour. commodity. Labourer sells his labour but the buyer (the employer) stands in an advantageous position. Therefore wage-problem emphasises the need of a trade-union. Trade union is an organisation "designed to put the seller of labour on an equality with the buyer as regards bargaining strength." By forming it, the labourer insures against exploitation. Without trade union, a happy solution of the wage-question is an impossibility. The employer will always go on for bargaining, unless he is forced otherwise by the stress of circumstances. The higher conception of a satisfied worker as an asset to an organisation is yet to come.

There are different theories of labour. The subsistence theory, the so-called Iron Law of Wages, is that wages tend to fall to the amount which will provide only the bare necessities of the labourer and his family. There is again the cost of production theory. Labour is a commodity. The value of a commodity is determined by its cost of production. The value of labour means wages and the cost of production is the minimum necessary to maintain the worker and his family. This theory has been abandoned as it cannot explain the inequality of wages. If we accept the Subsistence Theory, the wages of a skilled worker and unskilled labourer are to remain the same.

The production of commodities takes a long time but labourer gets wages before the commodities are produced. In that sense, wages are an advance from capital. Hence, John Stuart Mill argues that wages depend upon the demand and supply of labour or on the proportion between capital and population. By population, here is meant the number of labouring class and by capital is meant the circulating capital. The amount of wages depends on the amount of circulating capital in the country and it is called wages fund theory. As a consequence of this theory, wages can rise if the circulating capital increase or the number of labourers decrease, otherwise wages could rise in one industry at the expense of another. This theory is defective because wages are not paid out of capital and the amount of capital from which wages are an advance is not so rigidly fixed as is assumed by this theory.

An efficient worker gets high wages as the product of his work is great. Anything that increases the efficiency of worker will increase also his wages. This is the productive theory of wages.

The standard of life influences wages considerably. If the standard of life be high and real wages are threatened, that leads the workers to act together and fight for high wages.

The volume of national dividend influences wages. Wages will be high, if the natural resources of the country or its accumulated capital or the science and skill of its inhabitants are great.

Inequality of opportunity is a determining factor in wages.

On a close analysis, we find that the chief determining influences in wages are the worker's conception of the standard of life, the volume of the flow of wealth in the country, relative plenty and scarcity of different agents of production and relative plenty or scarcity of different kinds of labour. Prof. Chapman is right when he says—"The more employers there are to compete with one another, the better is it for labour".

The general tendency of the age, as we have seen in an earlier chapter, is to organise labour and to protect it from exploitation. In this connection, we may point out that labour has a few peculiarities—an acquaintance with which is essential before any organisation thereof is possible. Firstly, a labourer sells his labour but he himself retains his own property: "those who bear the expenses of rearing and educating him receive but very little of the price that is paid for his services in later years". If I build a factory, I receive the price and also the profit, but if I train up my son, I may not get back what I have spent, not to speak of any profit. Secondly, the seller of labour must deliver it himself, therefore the conditions and places of selling must be wholesome. Thirdly, the labour power is perishable and the sellers of it are poor and have no reserve fund and they cannot easily withhold it from the market. Fourthly, it requires time to train labour for its work and the returns resulting from the training come very slowly. Fifthly, in the case of machine, there is wear and tear but in the case of a labourer there is not only wear and tear but also fatigue and other inconveniences of work.

For all these peculiarities, the labourer requires to be organised, otherwise, exploitation is inevitable. Earnings of labour depend not only on its efficiency but also on the length of time it can afford to wait and on the amount of moral force due to organisation at its back.

The problem of the world is the problem of distribution—on the satisfactory solution of which depends the salvation of humanity. The ills from which the society suffers spring from the uneven distribution of national income.

## PROFITS

Profit is the income of the entrepreneur. The ingredients of the gross profits of a business are earnings of management, payments for risk-taking and for the special knowledge and advantages associated with it. Profit is a surplus above the expense of production. According to the English theory, profit is a part of marginal cost; and of the price of the product. According to the American theory, profit is a surplus above cost. According to Walker, profit means the net gain of the employer, employing no capital of his own. He further holds that profits constitute a species of the same genus as rent. Prof. Marshall uses the word "Profit" to include the interest on the capital owned and invested by the businessman in his business and his earnings of undertaking and management. The socialists regard all profits as legalised robbery. Prof. Seligman maintains that profits are always a surplus; they are the differences between the cost of production of acquisition and the selling price. The excess of price over cost constitutes profits. "Profits are necessarily unstable. They last only as long as the economic fluctuation or variation from the normal condition continues. If a manufacturer continually introduces new invention, he may retain his superiority over his competitor. In every case however, as soon as the original force has spent itself and competition has set in, the profits tend to vanish. In this sense and in this sense only, it is true that profits tend either to equality or a minimum."

Prof. Seligman clearly distinguishes profits from interest and wages. "Interest is a part of cost; profit is a surplus above cost. Interest has a normal rate; profits may have an average rate but no normal rate. The marginal producer earns no profit. There is under normal conditions of progress a tendency in the rate of interest to fall but never to vanish; there is under competitive conditions always a tendency for the rate of profits in each individual business to disappear. Thus in ordinary enterprises, profit is the great lure of energy, and competition the great destroyer of profit. Competitive profits, the union of both, are hence the symptom of progress. Profits are a result of price, not a cause of price. Production at lower cost creates profits; competition forces down to lower cost and eliminates profits. Wages differ from profits in that wages are a stipulated income and profits a residual income. There is a normal rate of wages, there is no normal rate of profits. Wages are a part of cost, profits a surplus above cost. Above all, profits differ from wages in that profits are the direct result of price fluctuations."

## RENT

Whatever is annually paid by a farmer to his landlord is rent in the popular sense of the term. It is a loose definition confounding

the interest and profit of capital with the rent. Ricardo defines rent as that portion of the produce of the earth which is paid to the landlord for the use of the original and indestructible powers of the soil. Without the knowledge of rent, Ricardo goes on, it is impossible to understand the effect of the progress of wealth on profits and wages or to trace satisfactorily the influence of taxation on different classes of the community. Ricardo in developing his theory of land rent proceeds to say:—"On the first settling of a country in which there is an abundance of rich and fertile land, a very small proportion of which is required to be cultivated for the support of the actual population or indeed can be cultivated with the capital which the population can command, there will be no rent for no one would pay for the use of land when there was an abundant quantity not yet appropriated and, therefore at the disposal of whosoever might choose to cultivate it—when with the progress of society land of the second degree of fertility is taken into cultivation, rent immediately commences on that of the first quality and the amount of that rent will depend on the difference in the quality of these two portions of land. When land of the third quality is taken into cultivation, rent immediately commences on the second and it is regulated as before by the difference in productive powers. At the same time the rent of the first quality will rise . . . . In such case capital will be preferably employed on the old land and will equally create a rent; for rent is always the difference between the produce obtained by the employment of two equal quantities of capital and labour . . . . The most fertile and most favourably situated land will be first cultivated . . . .

"The exchangeable value of all commodities whether they be manufactured or the produce of the mines or the produce of land, is always regulated . . . . by those who continue to produce them under the most unfavourable circumstances . . . . corn is not high because a rent is paid but a rent is paid because corn is high. Rent is not a component part of the price of commodities.

" . . . The rise of rent is always the effect of the increasing wealth of the country, and of the difficulty of providing food for its augmented population, it is a symptom, but it is never a cause of wealth . . . ."

Ricardo's statement of course lacks systematic expression and ordered arrangement but we could detect three causes of rent in his theory, first, the difference of natural fertility between different soils; secondly, the difference of situation with reference to the market; and thirdly, the difference in the returns to capital and labour on the same soil (because of the law of diminishing returns). Henry Sidgwick said that the Ricardian theory of rent "combines in a somewhat confusing way at least three distinct theories of which the first is a historical

theory as to the origin of rent, the second a statical theory of the economic forces tending to determine rent at the present time and the third a dynamical theory of the causes continually tending to increase rent as wealth and population increase."

Ricardo's theory of rent has been criticised often unsympathetically. Critics have objected to the rent being paid for the indestructible properties of the soil whereas in fact the fertility is often exhausted. The fertility is not the only property of soil. There are other properties such as climate, extent, conformation, etc., which are really indestructible and unproducible. Mr. Carey has attacked his theory on the ground that it is historically false. Even if his historical aspect is disputed, the essentials of his theory are in no way affected. Ricardo's theory also presupposes that there is the same intensity of cultivation for superior and inferior lands. But in actual fact, superior land is more intensively cultivated. His theory of rent does not also apply to actual rents in different countries of the world. Ricardo assumes free competition between the landlord and the tenant but rents are determined not merely by competition but by custom, public opinion, sentiment, etc. As pointed out by Ricardo, rent does not form a part of the price of the agricultural produce.

The modern theory of rent though based upon Ricardo is this:—  
 Modern theory of rent. the best land is cultivated first. When the population grows and the demand increases, the lands are more intensively cultivated. On account of the law of diminishing returns, inferior lands are brought into cultivation. The economic rent of a superior land is the total surplus over cost, "yielded by all the doses of labour and capital".

There are two elements in mine rents. The gross rent paid to the owner of mines is a payment as a compensation for the exhaustion of mines. The rent proper is paid for differential advantages relating to situation and facilities of working.

The rent of building sites is due to situational advantages.

Quasi-rent is a temporary rent. Prof. Marshall defines quasi-rent as follows:—"The net incomes from appliances for production already made may be called their quasi-rents; partly because we shall find that when we are considering periods of time too short to enable the supply of such appliances to respond to a change in the demand for them, the stock (of these appliances) has to be regarded as temporarily fixed. For the time they hold nearly the same relation to the price of the things which they take part in producing, as is held by land or any other free gift of nature, of which the stock is permanently fixed; and whose net income is a true rent."

## INTEREST

We deem it proper to point out at the outset that the term "interest" is used in economics in more than one sense. As for example, the term is used to include one or more of the following payments—e. g., (1) payment for capital lent when the lender is not required to incur any risk or to undertake any work other than that involved in saving;

(2) remuneration for risks of loss, which may be (a) personal risks or (b) business risks;

(3) payment for inconvenience of the investment;

(4) payment for the work and worry involved in watching investments, cutting them in, and re-investing.

It may be pointed out by way of explanation that when capital is lent to a businessman, without any adequate security from him, the lender certainly incurs certain risks—the businessman may turn out to be dishonest or incompetent and thus a personal risk may arise. Then again the business in which the capital is applied by the borrower, may be speculative, as all businesses are speculative to some extent. The degree to which a business may be speculative and uncertain depends on the character of the business—and therefore this element of business risk may vary as between different businesses.

Competition settles, as Chapman points out, in a rough fashion the level of payments against business risks in the several industries and trades of a country. Theoretically these payments should be of such an amount that on an average, their annual sum in any given industry would about equal the business losses incurred annually in that industry on an average, apart from losses for which unusual incapacity or dishonesty were answerable. The perfectly safe investment is, apart from risks, one in which the investor can place his money, leave it as long as he desires and withdraw it at the shortest notice without loss. It may be pointed out that investment of this kind does not constitute a very considerable proportion of the total investments in a country. And the explanation of high rates of interest is to be found here—the lender is called upon to do a great deal of work, besides mere saving and lending. Besides the risks, he is required to devote a great part of his time to making enquiries, to book-keeping and things of that nature.

After we allow fully for the payments and remunerations mentioned in classes II, III and IV, a balance exists. This is payment of class I which is called economic interest. The rate of interest paid on the best and safest stock of the highest repute is the nearest approximation to it.

## DEMAND FOR CAPITAL

To explain economic interest, we have to see what constitutes demand for capital. First there is demand for capital for productive purposes, and let us see what its influence is on the determination of the rate of interest for capital. Now, demand for productive purposes may be illustrated by imagining the case of a carpenter who earns a net income of say Rs. 100/- a year, which he can materially augment, if he could avail himself of more tools and machinery in the making of furniture. Let us imagine that an additional amount of tools and machinery worth Rs. 100/- would leave him an income of Rs. 40/- a year, in addition to his previous income. If our supposititious carpenter sets apart Rs. 5/- as the fund out of which he can meet the wear and tear of his tools, the net additional income may be regarded to be Rs. 35/-. Now if a 2nd instalment of Rs. 100/- were available for him, and were used in the purchase of further labour saving tools and devices, we may legitimately suppose that this 2nd instalment would bring him an additional net income which is less than Rs. 35/- which was the net return for the first instalment of Rs. 100/-, because the 2nd instalment cannot be as effectively used as the first which must have been applied in the satisfaction of his most urgent needs; similarly, with every additional instalment of a similar sum, the net additional return would be substantial but successively and gradually less than the previous instalments.

The Schedule stating these values of different quantities of capital to the carpenter may be called his demand schedule for capital. Other producers, like our carpenter, have their uses of capital. The demands of all these producers may be collectively called the local productive demand for capital in the community.

Under these conditions, the gain or interest, which the owners of capital will secure will be determined by the least productive use of capital, or to be more accurate in language, by the addition to the ultimate product which results from the least effective phase of the round-about or capital-using process. Because, supposing our imaginary carpenter turns to the furthest limit of instalments, as permitted by the existing supply of capital, there is a limit at which the instalment in question, would not bring him more than say, Rs. 5/-, per annum, as net income. So long as there is effective competition and so long as all the carpenters can avail themselves of the existing amount of capital, it is evident, that interest or price which the carpenters will pay for the capital will be settled at no more than Rs. 5, because that is the maximum price which the carpenters need pay to absorb the whole of the existing supply of capital. If the capitalists, that is, the lenders demand a higher price or rate of interest, say

Rs. 8/- per cent. evidently those carpenters who applied capital to such uses as gave them a return of Rs. 5/- and no more, would refuse to borrow and apply capital any longer at the margin, because they cannot be expected to borrow capital at Rs. 8/-, while they gain only Rs. 5/-. Therefore if the rate be 8, in all those uses of capital in the carpenter's industry, for which the return is less than Rs. 8/-, the carpenter will no longer apply any further capital. Again, if the interest offered by some carpenters be less than Rs. 5/- (*i.e.*, the amount of net gain by application of capital in the least productive rise), say Rs. 3/-, the capitalists will withdraw their capital and lend them to other carpenters, who according to our assumptions, get a return of Rs. 5/- from the least productive application of capital and who, therefore, will offer, conditions of competition being assumed, at least Rs. 5/- as the interest per Rs. 100/-, as this rate does in no way involve any loss to them. Thus we see, how interest settles at the amount which the producers obtain from the least productive rise of capital. It may be pointed here, lest the reader should forget, that in illustration given above, the fundamental assumption has been, besides that relating to competition, that carpenters' industry is the sole industry to which the businessmen may devote themselves—an assumption which is merely illustrative and which has been made for simplicity. We find therefore that conditions of supply of capital remaining what they are, "the interest which the owners of capital will secure, will be determined by the least productive use of capital. Again, those who use capital in ways more effective than the least, cannot retain the superior gain for themselves. Since all who have capital at command can turn to these more effective ways, competition will prevent any one set of persons from securing specially high gains from them. It is the effectiveness of the last instalment of capital, that determines the rate of gain for all capital. Or to put it in other words, the return to capital depends on its marginal productivity."

### SUPPLY OF CAPITAL

We have thus seen how interest is influenced and governed by demand for capital for productive purposes. We now turn to the conditions of supply of capital and to the equilibrium of supply and demand. "The rate of interest like the value of a commodity, is settled at any given period chiefly by demand. But in the long run the variation in supply must have their effects also".

Let us examine the situation of those who have a surplus of present means—the lenders from whom the supply of capital is available. If the accumulation of a surplus involved no inconvenience, the supply of savings would increase rapidly and perhaps, indefinitely

under the inducement of a reward in the way of interest. So long as the producer-borrowers pay a premium to the lenders, in addition to the sum lent, the savings would increase and the producers, by avail-ing of these increased savings, would make larger and longer advances to the labourers. Assuming the conditions of industry to remain what they are, and no inventions to be made in regard to increasing the efficiency of labour, a time will come, when the additional ad-vance to the labourers will bring no increase in output. The marginal productivity of capital as explained before, would be non-existent and interest on capital would evaporate. So long as this stage is not reached, the conclusion is permissible that 'accumulation and saving do not continue indefinitely unless there be some inducement offered'.

The question here arises whether, saving, which ultimately is the basis of the making and maintenance of capital, requires the in-centive and inducement in the shape of a payment of interest. We have to consider here 3 classes of savings, depending on the require-ment or otherwise of a pecuniary inducement.

First, there is an appreciable volume of savings which would be made even if there were no pecuniary returns. Secondly, it is possible that a situation may arise when the premium would proceed not from the borrower, as is usually the case, but from the lender himself. Thirdly, there are savings which absolutely depend upon and require a reward in the shape of interest. The 2nd class, referred to above, is more of theoretical than practical importance. "The situ-ation in which the lender is ready to accept at a later date a less sum than he parts with in the present, might arise where means were very abundant in the present and where a future with scanty means was expected. At forty Rs. 200/- might be saved from an ample income with comparative ease and it is conceivable that it would be saved to have, at seventy, the certainty of Rs. 150/-". Further, such cases might occur in the pre-money state and in the absence of order-ed government when hoarding might present difficulties and to avoid which, loans at negative interest might have been possible. Now that money—as a fairly stable standard of value and as being hoard-able—brings an easy alternative between present and future use, we might set aside as negligible the possibility of negative interest. "But though the cases in which interest might be negative may thus be neglected, those in which it might be Zero are many". Large volumes of savings take place without the need of stimulus in the way of interest. "A large part of the deposits in savings banks in most civilised countries are probably of this nature!" Savings of this character would be made in any case, by way of providing against a rainy day, irrespective of whether any reward is given or not. Another instance of this class of savings is furnished by the accumulations of

life insurance companies from annual premiums. It is believed that the proportion of this class of savings though not accurately measurable, is yet considerable.

We come next to the class of savings which would not be made at all except under the inducement of reward, though this inducement need not be equally strong over the whole range. Much saving that is made under pecuniary stimulus, would yet persist even if interest were lowered. Other savings again require the whole current return for their continuance.

Let us see what happens if the current rate of return offered should drop considerably. It is certain that many would cease to save, but there would be many others with ample present means, who would continue their savings unchecked. It has been suggested that there are cases in which, a drop in the rate of return would far from checking saving increase it. Many persons of provident habits, in order to provide a settled income for the future, say Rs. 4000/- a year, would save 80,000 when the rate of interest is 5 per cent. In such a case if there be a drop in the rate to  $2\frac{1}{2}$  per cent. double the sum must be saved in order to settle the same income.

The possibility of increase in savings under this circumstance, is however limited. As Taussig points out, a wish is very different from a deed. For the immense majority of men, it would be difficult to double the amount accumulated.

"On the other hand, with many individuals and for great amounts of savings, a higher price leads to an enlargement of supply and a lower price to a lessening of supply". In between the higher and the lower price in rate of returns there is the current rate and among the various savings, there are some for which that current rate is just enough to induce the sacrifice involved. Here we get the conception of a marginal instalment of saving which would be made only when and so long as the current rate prevails, and which would cease the moment it is lowered.

The result of the discussion of the conditions of demand as carried on in the first part of this chapter and that of the condition of supply as pointed out just now, can now be presented in a full and comprehensive statement. The interaction of demand and supply settles the rate of interest as we have seen in our discussion of the theory of value. Here the force on the side of demand is marginal productivity of capital, while that on the side of supply is represented by the marginal saving or marginal forbearance. While on the side of demand, the least productive use of capital or marginal productivity tends to determine the rate of interest, on the side of supply, it is the marginal forbearance that influences the rate of interest. Marginal productivity of capital determines the intensity of demand and as such,

the interest must not be higher than is measured by the marginal productivity of capital in order that the existing supply of capital may be absorbed, while marginal saving or forbearance measures the sacrifice or abstinence, whatever it may be, that is involved in bringing the supply to the limit and extent to which it has been brought, or more precisely, the sacrifice which is occasioned by the marginal increment of the supply of capital—so that when the price offered is less than that what is commensurate with marginal forbearance, the margin shifts and the savings lessen, while if price or reward offered is greater than that required by the marginal saving, the margin again shifts and the savings increase. When the price at the margin at which the marginal saver is willing to save, corresponds to the gain which is secured from the use of the marginal increment of capital, the equilibrium is reached; the rate of interest settles at a point where the marginal productivity of capital suffices to bring out the marginal instalment of saving.

We propose to conclude this chapter by referring briefly to the relation between loans for consumption and the rate of interest therefor. It should be noted that such loans introduce no new principle concerning the play of demand. "There are gradations in the demands of the various borrowers. Some have pressing needs, others have needs less pressing." Assuming a fixed supply of the present means, the rate of interest would settle at the point determined by the least eager among the spendthrifts, *i.e.*, by marginal utility among the borrowing consumers.

The regulation of the rate of interest for 'consumption loans' by the Government is just and desirable but in the case of 'production loans' such regulation is likely to be resented by businessmen.

There are different theories of interest: according to the Productive theory, interest is a price paid for the productive services of capital; according to the Use theory, interest is paid by the borrower for the use of the capital; according to the Abstinence theory, interest is the payment by the borrower made for the abstinence of the lender from the use of the capital; according to the Labour theory, interest is paid for the capitalist's labour. The Socialists regard interest as theft.

## CHAPTER XVI

### The State and Economic Organisation

The State is local and commerce cosmopolitan. Political organisation has a boundary of its own but economic organisation is world-wide and cannot be shut up within specified political boundaries. In this sense, economic relations are largely independent of political activities. There have been attempts by the State to control the flow of trade and the distribution of labour and capital among different employments. But it has failed. There have been of course State-regulations but commerce and industry, exchange and distribution, production and consumption have been directed by contracts between individuals, rather than by the laws of Parliament. The State has a subordinate influence; the law hampers or helps but does not direct commerce.

The political organisation and economic organisation react on each other and what ought to be the true extent of Policy of non-interference. relation is a delicate question. The old view is that the policy of non-interference is the best. "Adam Smith had shown that the organisation of industry and commerce was a spontaneous thing owing little or nothing to the direct action of the State and that it had in it a sort of self-regulating principle which made it unnecessary for the State to interfere in the public interest. This self-regulating principle is the action of competition". The doctrine of non-interference increases production as self-interest becomes the moving motor whereby the car of production is directed.

The economic organisation is built up by private property and free enterprise. The society allows every one the exclusive use and control of private wealth. The society allows every one to seek wealth in the way he chooses. There is no interference and much of the wealth and prosperity of the nation are due to this policy of non-interference. "Property, that is, the exclusive use of wealth, is the prize offered by society to induce individuals to compete in producing wealth; freedom of enterprise is the device on which society relies to ensure that no one shall acquire wealth without competition." The guide of individuals in any business enterprise is the market value which on the other hand depends on the relation of supply to demand. Competition regulates distribution and production. Though there is freedom of enterprise, the businessmen cannot be whimsical because there is competition which protects consumer against exploitation and which even secures fair treatment

of labourers. "The present competitive system is a just description of the present economic organisation."

The old view of State non-interference is undergoing transformation. Experience has shown that the State cannot Policy of interference. and does not keep itself aloof from economic activities.

Freedom of enterprise has more or less been regulated by the State. Strictly, the function of the State is protection; it has nothing to interfere with human activities, political or economic. Individualists resent such interference. But in the process of time, things are shaping in a way that the State cannot with justice but interfere. Nowadays, the State looks to sanitation, education and to any blessed reform that human mind is prompted to resort to. There is a school advocating that the State should extend its influence over every conceivable human activity. That is the school of State-socialism. Every progressive modern government is socialist in this sense. There is another school—an idealist school—which believes that the State by swallowing up all individual activities will make all the people a mere lump of flesh—everything done by the State and nothing to remain for themselves. Rabindranath Tagore and other idealists believe that the State should make people fit for improving their conditions; the State should not do every thing on their behalf. Village-reconstruction, cottage-industries, co-operative movement, ministration to human ills, education—all these should be taken up by individuals, individually or collectively and the State would be there to help them and train them upto the necessary standard of efficiency. But the tendencies of the age are that the State is leaning towards socialism which attempts to kill individual initiative and to get every thing done by its organisation. They say it is fair. But by killing individual initiative, State-socialism makes no room for the growth of personality and the world is being robbed of individuals who may be sources of strength to all around.

Thus we find that there has been a steady growth of State-interference with the economic activities. The State regulates industry by looking to sanitation, ventilation, fencing of machinery, hours of work, age of workers and medical inspection and even wages. Had there been no interference by the State, mines and factories would have been made a hell and it is in the interest of justice that the State had to interfere in scorn of economic principles. The mere fact of competition does not do away with all the social evils attendant upon any industry. Therefore, the State had to place restrictions on the freedom of private enterprise. "The difference between the unregulated factory industry of the early nineteenth century and the regulated industry of to-day is the same as the difference between a fight in the street and a fight in the ring under Queensberry rules."

In the interest of consumers, the State interferes. The State instances of interference. imposes a minimum quality in the case of certain services such as medical and legal professions. The State regulates the sale of the articles of food by Adulteration Acts and appoints inspectors to see that the Acts are followed. The inspection of weights and measures is also done by the State. There is also the restriction of the sale of alcoholic drinks. There is protective tariff which is justified on economic and political grounds. The State supersedes private enterprise in certain cases of monopoly. Public utility services, railways and postal and telegraph organisation are taken over by the State instead of being left to private enterprise. The State often purchases the rights of private property. By a system of tenancy laws, the State regulates the economic relations between the landlords and tenants. The State is responsible for most kinds of education. Primary education, research training and university education—all are in the care of the State. Sanitation and highways are taken over by the State. By Insurance Act, the State controls insurance business. The State regulates labour by labour legislation and factory laws. There is poor law for the care of the poor. The State extends patronage to art. "Left to the ordinary laws of supply and demand, the cult of beauty, the pursuit of knowledge and the service of religion—perhaps one should say religious organisations—would all languish."

The normal functions of the Government are national defence, defence of individuals against loss, defence of property, and enforcement of laws in discharge of its functions. National defence requires Government to make unprofitable railways. It may necessitate military stores and government control of the manufacture and sale of dangerous explosives. All these require money and there is need of taxation for the purpose of revenue. Taxes are the prices we pay for the services of the Government. Says Adam Smith—"The subjects of every State ought to contribute towards the support of the Government as nearly as possible in proportion to their respective abilities i.e., in proportion to the revenue which they enjoy under the protection of the State." The principles of taxation have been discussed in a previous chapter.

In the language of Prof. Henry Clay, it can be said :—"Society has departed very widely from the strict rule of non-interference with industry by the State ; indeed, the policy of non-interference was never carried out logically by any State, and in the United Kingdom the beginnings of Factory Legislation, the type of the new State interference, were established in the practice of the State before the Corn Laws, the type of the old interference, were repealed. While however, State interference is general, the direct supersession of private

enterprise by State action is still the exception. If we ask for a brief description of the present social system in its economic aspect, "competitive" is still the best we can find; if we look for a rule or principle on which the system is founded, we find it still in the separation of economic organisation from political organisation. As a rule and in the main, society still relies for the organisation of its economic activities on private enterprise, with private property for incentive and competition as regulator."

The State, we find, may function with reference to economic activities by controlling them, by encouraging them and by undertaking them. Control may be called for when private enterprise is not lacking in vigour but is apt to do damage incidentally. "Encouragement may be needed when private enterprise falls short of furnishing what the community wants. Finally, there is a *prima facie* case for the undertaking of certain enterprises by the State when control or encouragement is needed and when the State happens to be an effective producing instrument." The need of supplementing private enterprise arises from various reasons which are catalogued by Prof. Chapman thus:—(1) There are certain businesses which are bound or almost bound to get organised as monopolies such as provision of gas, water and urban transportation. (2) Certain productive functions have been subsidised or assumed by the State because of the suspicion or conviction that the incentive of private gain fails to insure provision of what is wanted even when its provision would pay. (3) There are certain purely economic activities which in private hands would never yield a revenue but which nevertheless it would pay a community to furnish itself with, such as public bridges, public roads. (4) There are cases in which a private gain is made at the expense of a heavy economic loss to society such as Trust. (5) There are cases in which private initiative is not effectually induced by competition to produce satisfactory qualities of what is wanted, either because of the ignorance of consumers or because of the difficulty which consumers experience in trying to determine the quality of what is supplied or for other reasons such as penalising adulteration.

The State also passes laws to facilitate business. The laws of contract and company are instances which protect people from dishonesty. If there were no good laws to regulate business, efficient functioning would have been an impossibility. Moreover, in times of emergency such as war, the State becomes responsible for the supplies of staple food and materials relating to maintenance and equipment of the forces and to the essential needs of the people. "In critical times, it is not safe to leave the acquisition of these to the play of competitive forces. . . . Moreover, the Government has to see to it that private demands are duly subordinated to its demands. In ordinary

times, such an interference would have been regarded as a trespass. Thus it is found that at the one extreme, the State is frequently called upon to bridle private initiative. But at the other extreme, private initiative fails to respond or to respond adequately to the wants of the community. The need at the latter extreme is State encouragement, if the State decides to enlist the forces of private initiative instead of undertaking the work itself. The State may encourage business directly and indirectly. It encourages them directly when it subsidises them and indirectly when it protects them against competition and so ensures them a market . . . . . The worst of all State encouragement of business, both direct and indirect, when the State encouragement must be continued for an indefinite time is that vested interests are created by it. But, sometimes, temporary assistance is all that is needed. An industrial system driven by the spring of self-interest so called, is in parts like a cheap watch. The spring of the cheap watch may be strong enough to keep the works going but after winding, the watch may want shaking to make it start. So temporary stimuli may be requisite to get parts of the industrial system to work. Ordinarily, there is no difficulty in administering the fillip which is wanted. For suitable purposes, the State can furnish loans at a low rate of interest or even to make a contribution to capital expenditure without asking for repayment."

In India, a clumsy sort of State-socialism exists. It is State-socialism because the State interferes in nearly all the activities of the people; it is clumsy because the principles of socialism are not recognised. The State here interferes with the rights of the landlords by tenancy laws. The State controls education, village reconstruction through Union Boards and other civic amenities through District Boards and Municipalities whose status is based upon State's sanction. To cope with the famines, all the provincial governments have famine codes. Co-operative movement in India is a governmental organisation and the societies are regulated by Co-operative Credit Societies' Acts of 1904 and 1912. Agricultural improvements are in the hands of the State and irrigation projects are executed by the Government. By the establishment of Tariff Board, the State doles out protection to the industries which require it. India is a member of the League of Nations and as such International labour regulations are applicable to India. Critics may contend that the Governmental provisions in regard to social and economic activities are not adequate but it cannot be pointed out in the year of Grace 1931 that the Indian State is blind to all these activities. Like all other modern States, the Indian Government is socialistic without any obligation to the principles of socialism.

The present economic system makes certain assumptions on which it depends for its justification. Firstly, that the Basic assumptions of an economic system. individuals in their economic relation can be relied on to pursue their own interest and that their action will be rational and informed. But in fact it is not so. Neither producers nor consumers are rational. Consumers do not always understand their interest as when they are duped by producers. So there is need of adulteration acts. Consumers are deceived by advertisements, surface finish, fancy wrappings and introduction of novelties. The producers boom up a fashion and get their goods sold rapidly. The consumers feel a tendency to buy things from the nearest shop, from the businessmen whose dealings have charmed him. Persuasive arts of salesmen cannot be got over. Thus we find that the self-interest of consumers cannot be relied upon nor are the tricks of producers rational. Producers spend large sums of money in getting control of the consumers whose only protective influence is that of competition. "Fortunately human beings as a rule remain human in their economic relations; they are influenced by other than commercial motives. By relying on material self-interest for the driving force of industry, however, society encourages a wild pursuit of wealth; it penalises the man (or class) that does not care about money-getting, and it tends to put wealth under the control of the greedy and unscrupulous."

The second assumption is that competition leads to the survival of the fittest. But in the world, circumstanced as it is, free competition is not possible. The rich are better placed than the poor. Unless all start with equal resources, there can be no meaning in free competition. Possession of riches is taken as both evidence and reward of "fitness". Thus the freedom of enterprise is an empty privilege and people having property take advantage of the whole situation. Economic competition leads to the survival of the "fittest" and here the "fittest" is "fittest" for acquiring money which may be a main objective but certainly not the chief end of man. Free competition stands condemned in the region of art and religious life. Rapid acquisition of wealth certainly is not the only criterion of proving human fitness.

The third assumption is that private wealth is the reward of services and services will be induced by the prospect of private wealth. But facts tell against this assumption. It has been found that private enterprise is only an extension of the privilege to individuals for the exaction of payment out of proportion to service and State-supersession has become a necessity. Though free competition is necessary in the interest of the consumers, things have been made to shape in a way through the subtle shrewdness of greedy businessmen that competition becomes a menace to them. The customers are

influenced by various ways and free enterprise becomes an engine of oppression. "The interest of society lies in a large output and low values, the interest of producers in high values and if they can secure high values by no other means, they will contrive to limit output. There is therefore in the system of free enterprise a principle encouraging producers to make a profit out of society's loss; they can make society pay them more by the simple process of giving society less." So restrictions become frequent. The absence of rational conduct on the part of consumers and the presence of self-interest among the producers are the two great disturbing elements and go against the view-point that wealth is obtained by service. The economic organisation would have been an ideal one if private wealth would have been the reward of service alone and there would not have arisen any necessity on the part of the State to intervene. The consumers are duped, freedom of enterprise is abused, healthy competition is stultified and illegitimate speculation is resorted to. All these bring in wealth but give no service. Thus wealth stands divorced from service.

There are other defects inherent in the structure of the society.

**Defects in society.** By virtue of inheritance, people acquire wealth without rendering any service. Inheritance is responsible for unequal division of wealth. It is no merit in a man to be born as the son of a millionaire, "yet the society rewards his judicious choice of parents more highly than it rewards the efforts of its greatest artists, philosophers, scientists and inventors."

For all these evils and defects, State-intervention is the only alternative. The State has to administer justice, impart education and help sanitation, all at a loss. The State has to look to the interests of the workers and labourers. Many people are too poor to pay for things which it is in the public interest that they should have. Public money should flow freely for the education of the poorer class. It is only economic chivalry both on the part of the State and of the rich people which can cure many of the evils of the society. If the State fails to afford relief to the joyless existence of workers, it is the State that will suffer in the long run because able workers and good citizens cannot otherwise be expected of them. The State in the interest of society has to run trams and light railways at a loss. The State has to encourage art, researches, studies, etc. Moreover, there are services which are to be enjoyed communally. "Utility to community is one thing, utility to individuals another. Where individual values and social values coincide, the supply of services can be left to private enterprise; where they do not coincide, the State or some

other public body must act. In the case of government enterprise, a commercial loss may be a social gain."

The fourth assumption is that market value is an ideal indicator for production to follow. According to this view, the businessmen will follow market values and there will be no injustice to the society. The inequalities of wealth are making market value a misleading indicator for production. The moneyed class have the greatest claim on the productive resources of the society. The producers respond to the demands of the rich much more freely. The needs of society are overlooked; production follows its own interest.

## CHAPTER XVII

### Wealth and Welfare

The word "wealth" carries more meaning than one. The "economic wealth" is that which satisfies human want and is limited in quantity. That is the standard meaning in Economics. Whisky which satisfies thirst is wealth. Bad literature is as much wealth as good literature is. There must be quantitative limitation of things if they are to be counted as wealth. Fresh air is wealth if it is limited in supply.

Taken in its narrow sense, wealth is the product of economic organisation. The economic organisation produces means of satisfaction. Therefore the wealth of an individual is the means of satisfaction which he possesses. The amount of the product of industry and commerce is the wealth of the country.\* It may take a material form or the form of service, that is another aspect of the question. Coal is as much wealth as medical profession is. Coal satisfies human want for heat; a surgeon satisfies human want in the way of surgical treatment.

Now the question comes—how to measure the wealth—the wealth of a country. Wealth cannot be measured by totalling up all the forms of wealth; that system ignores the quality. One yard of one kind of cloth may be double the amount of wealth embodied in one yard of another kind of cloth. The ability of one teacher is superior to another. The best way to measure the wealth is to total up its exchange values. Exchange takes place through the medium of money, so we can measure wealth in money.

There are insurmountable difficulties in getting at the total amount of the product of economic organisation. Therefore, total wealth can be had by making a total of incomes which will be

\* A "rich" man is a man with a large command of the product of the economic organisation, whether he exercises it by buying goods or services. A "rich" country is a country which derives a large amount of product from its economic organisation, or has large claims on the product of other countries' economic organisation—as England has in the form of interest on foreign investments. The present age is "rich" compared with earlier ages, because the product of its economic organisation is so much greater; when we speak of the "growth of wealth" we mean the increase of product. On this conception of wealth the present economic organisation is based. It is directed solely to securing the largest possible product in proportion to expenditure, and is judged accordingly. Distribution is based on the assumption that those who contribute to production can be relied on to insist on a proportionate share of the product; they are "efficient" in proportion to their productivity, and the system is "fair" or "unfair" according as distribution is in proportion to productivity."—Prof. Henry Clay.

measured in money. A man's income can be brought out from various sources, chiefly from the Income Tax returns and censuses of wages. "This total of incomes is the total value of the annual product of the country's economic organisation; for the incomes are simply the claims on the product which the economic organisation gives rise to. The method of measuring wealth, then, and the estimate of the wealth of the country as a whole, are based on the conception of wealth as consisting in product."

There is another meaning of the word "wealth" denoting anything which contributes to human welfare. In this sense, some wants not contributing to welfare are excluded but unlimited supply does not hamper anything to be counted as wealth. The conceptions of welfare in this case present some difficulty. The people differ hopelessly so that there can be no common formula. The drunkard will regard whisky as wealth but his neighbours will refuse to attribute to it the virtue of wealth. Lloyd George may regard armament as wealth but Romain Rolland will not. There are also bound to be divergent conceptions of welfare. Environments, cultures and traditions influence human mind. The pendulum of the conception of welfare varies with every variation in ethical, aesthetic and political views. To probe into the divergent conceptions of welfare would be beyond the scope of political economy but our question is that wealth contributes to human welfare.

There are defects in the usual method of computing the country's wealth. In making total of the incomes, much is excluded. There are many unpaid services which are excluded. The services of domestic servants are included because they are paid but the services of wives and daughters are not counted. The services of M. P.'s are counted as a part of country's wealth because they receive salaries but there are host of members who serve in humbler councils and receive no salary and as such their services are out of consideration. The voluntary social and public service is ignored. A private park is counted as wealth as it adds to the owner's income but public parks are not reckoned as wealth as they will no longer form a part of money income. The vegetables grown for market use are included but vegetables for personal use are excluded. Thus there are good many things which are excluded in computing the country's wealth. On the other hand, much is included which is not wealth. There are sources of income to individuals which are not wealth, for example, National Debt.

The only objective measure of wealth is market value. Anna Pavlova gives a dancing show; it gives the same satisfaction whether services are secured for F 20 or for F 200. But national wealth will be measured

in money and it will be measured less or more depending on the market value which cannot be an absolute measure of satisfaction. So there is defect in the measurement of wealth. The market value is rough and fluctuating and to measure national wealth by totalling market values is to get no measure of satisfaction afforded to the nation by wealth. So it is said:—"If we are to measure national wealth by totalling means of satisfaction, we need a unit of satisfaction, a thing which we do not possess. At most, therefore, two thousand millions a year (the estimated wealth of U. K.) is a rough measure of the nation's *economic power*; not of its product, but of its productive capacity; not of the means of satisfactions afforded by the economic organisation, but of the command of them afforded by the economic organisation. The amount of satisfaction that the nation will derive from its economic organisation will depend, not only on the degree of productive power, but on its direction; not on the volume only of the product, but on its nature; not on the amount of wealth as measured only, but on its use."

Welfare is influenced by the distribution of wealth. Unequal distribution is a sore point in the world. Concentration of wealth in the hands of a few sets up a high standard of expenditure which is the despair of the poor and thus unhappiness grows. "The riches of the rich intensify the poverty of the poor." The present age is unhappy because of the inequalities of the world. The world is getting richer but human welfare is not being achieved to the same extent as it should be. Unequal distribution drives money into the hands of a few who acquire power because of their wealth and who are likely to be turned into despots and engines of tyranny. It is wealth that corrodes the finer points of man. "A class of multi-millionaires is a standing menace to the supremacy of the State; and the experience of beneficiaries suggests that a well-meaning millionaire is an almost greater nuisance than his wicked brother."

Wealth contributes to welfare if it is used in a better way. An increased amount of wealth distributed on a better basis may claim to have an appreciable influence on the welfare of humanity. Wealth increases production but a mere increase of production is no increase of welfare. Products are often wasted and to avoid waste, production is to be organised as systematically as consumption. In the age of modern civilisation, things are produced which have transient value; the wonder is that people prefer surface quality to the inner virtue. Things of beauty are sacrificed and objects giving immediate and obvious but not lasting and intense satisfaction are much more in evidence in the modern market. The producers are not to be blamed because they consult the demands and tastes and respond to the

purchasing power. This age is an age of ostentation. The surface finish attracts the purchasers. Thus welfare is of no concern and things move and behave in a way which shuts out wealth from contributing to human welfare; it is simply concerned with immediate satisfaction. This commercialism with its barbarity of ugly decorations is a menace because it seeks to set up the ideal of power over that of perfection. Therefore our fight is with "massed and congested wealth, red with aggressive inflammation".

There is no doubt, of course, that an increase of wealth is not necessarily an increase of welfare. The vulgar plenty of the 20th century has not added to the welfare of humanity; welfare is a mental attribute nourished by mental training. Experience has shown us that the rich as a class are no happier and no better than the poor as a class. But wealth cannot be left out of consideration in the sources of welfare. Some wealth is absolutely necessary for physical existence and in this way it is the basis of health and intellectual and spiritual activity. If there is wealth above the minimum indispensable to physical existence, it increases human freedom and powers of production and throws out openings for doing good to the world at large. We are indebted to the Industrial Revolution because it has made possible for every man to snatch the minimum, necessary for his existence and for many to receive surplus and in this indirect way, this economic organisation contributes to human welfare. If there are abuses of wealth all around, we can pity humanity because it has travelled afar from its own path. The materialists of to-day would argue by challenging the old conception of welfare and would say that physical comforts are not far removed from human welfare. We forbear arguing with them as that would take us deep into the region of ethics—what is welfare?

There comes another consideration. The modern economic system by its process of specialisation and the magic wand of large-scale production has increased the activity of man, and work, if rightly pursued, considered in the abstract, contributes to human welfare. It is work that energises a nation; it is work that brings out one's innate potentialities into fair play; it is work that sharpens one's initiative and inventive powers. But the influence of work on welfare can be estimated with reference to its object, the nature of its process and the nature of its control. If the object of work be demoralising, the work will demoralise the worker and *vice versa*. In the process of work, if there is variety, there is room for initiative and choice, otherwise, a monotonous work will atrophy man's faculties. Every creative work has an infinite variety but if the worker be a part of the machine, he will be no better than a "living tool". If the control be autocratic, the worker will wear

away for absence of freedom; so the nature of control is an important factor. If the worker cannot enjoy an amount of freedom, initiative and responsibility, the worker will have no efficiency for want of any interest in the work. If work is to contribute to welfare, it should be such as to develop the workers' personality. For this it must have variety; it must be responsible; there must be room for initiative and self-direction. But the modern age has seen the sacrifice of the producer to product; it is more so in an industrial country but in an agricultural country, there is no opportunity for large-scale production. The work of a farmer has more variety, more room for initiative and self-direction than the work of the ordinary artisan. In the case of a farmer, the specialisation cannot be carried to the farthest limit by subdividing the process of production and thus the living interest in the product is not eliminated. In an agricultural country, the economic system cannot control the farmer, but in the industrial scheme, it is the system that controls the artisan. That is the tragic romance of specialisation and large-scale production.

In the modern age, business is not guided by any moral code; it consults the laws of market which are dominated by the laws of demand and supply. Thus humanity has mistaken the end of wealth. That the world is not dead is shown by the fact that attempts are being made to divert humanity from its wrong path and such attempt is embodied in the movement of socialism which claims a different chapter for its treatment.

## CHAPTER XVIII

### Socialism

Socialism is an economic interpretation of humanity. It is a project for the re-shaping of human society upon new and better lines. In this industrial age, man has been transformed into a living money bag jumping from profit to profit and breaking the backbone of human races in its financial leapfrog. Capital has caught hold of the man and its disproportionate division has been the bane of the society. This machine civilisation with its monster car of economic organisation is throttling down human life and this vulgar profit-making age "sneers but it does not know how to smile". The cult of self-seeking is exhibited in all its shameless nakedness in industrialism. When the society was thus suffering from greed, injustice and oppression, a class of thinkers with a definite programme to remove the ills appeared on the scene and the expression "socialism" embodies their ideals. They were prompted by the old instinct of humanity but guided by the new conditions of society. They felt that the profiteer's bushel had hidden the light of truth. They therefore pleaded for better distribution of wealth. The socialists challenge the equity of the existing system of distribution and the search for a better system has given rise to numerous systems.\* The socialists criticise the existing system of production which is according to them wasteful. Unemployment is growing acute and the idle classes who spend do not work. They

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\* Forms of Socialism:—Scientific Socialism (Vide Marx, Engels), State Socialism, Fabianism—Collective Socialism (Vide Sidney and Webb, Bernard Shaw), Syndicalism (Vide Pelloutier, Pouget, Sorel), Guild-socialism (Vide Orage, Hobson, Cole). Bolshevism—Marxian Socialism, Communism (Vide Lenin, Trotsky), Fascism—nationalism and socialism as opposed to communism and other forms of proletarianism (Vide Mussolini, Gentile).

State Socialism, Collectivism and Solidarism are reactions against Communism and Anarchism. Syndicalism is the protest of working men as producers against all these etatism which are essentially capitalistic. Guild-socialism is as much against collectivism as against Syndicalism. Bolshevism is a realisation enroute to Anarchism. Fascism is a revolt against Bolshevism.

The nation is a unified whole:—State-Socialism, Collectivism, Solidarism, Fascism.

The nation is not a single entity—there are groups, sections and classes:—Bolshevism or Communism, Anarchism,

The State is an instrument of social welfare:—State-Socialism, Collectivism, Solidarism, Fascism.

The State is an evil:—Communism, Anarchism, Syndicalism, Guild-socialism.

claim that by a scientific organisation of production accurately estimating the needs of the community and carefully distributing the just quantity of each kind of goods, they would be in a position to counteract the wasteful effects of competition and harmful effects of unemployment. They further claim that they are for better distribution of wealth. The socialists, it is said, would consult the interests of the consumers by suspending the production of harmful goods and abolishing adulteration and deception. "Socialism relies upon the love of activity for its own sake, the desire to contribute to the common good . . . and the ambition to win social esteem and social distinction through conspicuous social service." Their programme is the State ownership and State management of the instruments of production *viz.*, land and capital and also the State distribution of national income among the different classes.

Socialism connotes and denotes some positive things *viz.*, (1) abolition of private property, (2) preparedness for Features of socialism. class warfare, (3) advocacy of violent methods (in most cases), (4) reliance on the State, (5) rule of the working classes and (6) a new theory of labour value. The socialists advocate that private property is a theft and as such it should be abolished. They do not pause for a moment to think that the constitution of human mind is such that it is hungry for acquisition and private property cannot be eradicated unless human mind undergoes a thorough transformation which cannot be brought about by any violence whatsoever. True, that property has an unholy aspect and in this industry-ridden age when intemperance and universal greed are the ruling moods, "property is intensely individualistic, it breaks all social bonds, it drains the sap of community, its unscrupulousness plays havoc all over the world, generating forces that can coax and coerce peoples to deeds of injustice and wholesale horror". But the holy aspect of private property should not be lost sight of: "Property is a medium for the expression of our personality. If we look at the negative aspect of this personality, we see in it the limits which separate one person from another. But its positive aspect reveals the truth that it is the only medium through which men can communicate with one another . . . If we kill our individuality because it is apt to be selfish, the human communion loses its meaning. But if we allow it to remain and develop, then being creative by nature, it must fashion its own world. Most often and for most men, property is the only frame that can give a foundation for such creation of a personal world. It is not merely money, not merely furniture, it does not represent merely acquisitiveness but is an objective manifestation of our taste, our imagination, our constructive faculties, our desire for self-sacrifice . . . Through this creative limitation which is our

personality, we receive, we give, we express ; our highest social training is to make our property the richest expression of the best in us, of that which is universal, of our individuality whose greatest illumination is love. Property is the unity of wealth that makes for communal prosperity, when it is alive to its function. Our wisdom lies not in destroying separateness of units but in maintaining the spirit of unity in its full strength."

**Class-warfare.** Human progress never lies through class-warfare and it is the verdict of history that co-operation and not antagonism contributes to human welfare. Violence destroys, it is not creative. Apprehending chaos, Mr. Wells says : "The worker is now beginning to strike for unprecedented ends—against the system, against the fundamental condition of labour. The thing our society has most to fear from labour is not organised resistance, not victorious strikes and raised condition but the black resentment that follows defeat."

**Reliance on State.** Too much reliance on the State kills initiative and liberty and there is thus no incentive to progress. If there is no stimulus of private ownership and private enterprise, inventions and improvements would suffer a checkmate. Moreover, "the duty of the government is to enable people to remove their own obstacles and not to remove the obstacles for them. By removing opportunities for the use of initiative, the people are left truly helpless. We should give strength to the people but never take upon us the work which should be theirs."

**Rule of working classes.** Socialism heralds the rule of the working classes. But idealists believe that minority of minds is the salt of the earth ; individualists proclaim that it is they who have always helped humanity and human future does never lie in crowd psychology ; historians know that civilisation is the creation of great individuals, it has not been created by big institutions ; psychologists find that unsuccessful masses cannot create anything great ; the lovers of freedom feel that any monster organisation negatives human relationship and reduces man to an automaton ; rationalists know that the aristocracy of few has permeated the democracy of many because the promised liberation from injustice and oppression is still a far cry. Democracy has made the problem of inequality more acute and more delicate. The remedy lies not in the transference of power from the few to the many because power has a corrosive influence ; it is in the building up of the principle of co-operation in human enterprise. Whatever is richest in man's life comes from this mutual co-operation. In the principle of co-operation, there is a compromise between the sacrifice of power and the ac-

quisition of power; no one is deprived and nothing is given; this interdependence of mankind is the solvent of the ills of the age.

The strength of socialism lies on the advocacy of worthier motive in business enterprise, in the recognition of a higher principle of humanity and in the promise of a brighter future for the joyless workers. Socialism is a great intellectual process, aided by love for mankind and a sense of justice. Socialism may be outvoted but its principles have gone deep into human mind and therein is its triumph. Socialism has taught us to think in terms of the society and not of the individual; it has led us to a closer examination of the economic functions of the State; it has emphasised the problems of distribution; it has placed the function of capital and the nature of profit in a clearer light; it has brought unearned increment into prominence; it has raised the dignity of labour and also its rewards. Socialism as an ideal has triumphed, but as an actuality, it is yet to show its intrinsic merit.

In India, socialism has not taken any deep root; it is a favourite cry here. The culture and traditions of India are not in favour of a socialistic State. Here the scheme

of the society which has accommodated many but has not disturbed harmony and unity is independent of the political organisation. India's attitude is "anti-State"; our history shows that thrones and empires came and passed away, but the people at large lived and grew in the society unconcerned. India's heart is in the society; therefore State interference will administer a deep cut across the fundamental concept of Hindu sovereignty. Moreover, it is not an industrial country and the industrial workers who are few are still unorganised. The Hindu theology is against any monstrous organisation and class-warfare guided by the selfish motive of more profit. Moreover, private property in India is the pillar of the society; it supports the welfare activities of the villages. Property is not a menace here but only a medium of expression of one's richness of heart. But the principles of socialism are sure to make an appeal to India because it is India which acknowledges and preaches liberation for all. What is huge is not great and India loves greatness and detests hugeness.

## CHAPTER XIX

### Development of Political Economy

The development of Political Economy is indeed interesting. To trace the progress of economic ideas from the early times down to the present age in a hurried and brief manner will not be out of place here. Indians did not attach much importance to economics. Their thinkers esteemed agriculture. Kautilya was much advanced in his economic idea. He understood the importance of trade, commerce and exchange in national life. India had extensive trade, both home and foreign, in the Buddhist age. India's commodities were noted for artistic designs. The Greeks and the Romans did not attach due importance to economic ideas. The two Greek writers, Xenophon and Aristotle noticed economic considerations which were extremely rudimentary. In the ancient world, production was carried on piecemeal by inferior classes ; political science engaged more attention. In the middle ages, the Government were busy with wars and the political structure of cities. It is only during the age of Renaissance that the world awakened to the problems of economics. With the dissolution of the mediæval world, expansion of commerce and the discovery of the New World, economic considerations began to engage the serious attention of thinkers.

The school of Mercantilism subscribed to the ideal that what was supposed to contribute to national wealth or strength must be fostered. The Mercantilists rather over-valued the precious metals, foreign trade, production of minerals, dense population and State action. The Mercantile system was intensely political. "The essence of the system lies in the total transformation of society and its organisation as well as of the State and its institutions, in the replacing of a local and territorial economic policy by that of the national State." It was dominant in Europe from the 16th to the 18th century.

The next school of economics was known as the Physiocratic school. Quesnay and Gournay created this school which counted Turgot as a strong adherent. The Physiocrats proclaimed the doctrine of *laissez faire* and advocated free trade. They believed in the operation of a sort of natural law in the economic system. They further held that agriculture alone was productive whereas manufacture merely altered the form of things and commerce their distribution, so the latter did not increase the wealth of the country. Therefore they concluded that the revenue of the State should be raised by a single direct tax on land.

The position of Adam Smith is unique. His contributions to economic thought are considerable. He envisaged a comprehensive social philosophy. He supported the Physiocrats and opposed the Mercantilists by advocating a system of natural liberty and free trade. He esteemed agriculture but did not ignore the productive character of manufactures which was denied by the Physiocrats. His "Wealth of Nations" is divided into five books. The first part treats of the "causes of improvement in the productive powers of labour and of the order according to which its produce is naturally distributed among the different ranks of the people." The second part treats of "the nature, accumulation and employment of stock" and the third of the "natural progress of opulence" as contrasted with the results of attempts to direct and regulate it. The fourth part consists almost entirely of an assault on Mercantilism and discussion of the details of economic policy associated with it. The fifth book is concerned with public finance.

### THE CLASSICAL SCHOOL

Ricardo is famed for his doctrines or improvement in doctrine with reference to rent, money and international trade. The strength of Ricardo lay in his remarkable power of abstraction and generalisation. "The chief fault of the school which he created probably lay in their too ready imposition of their theories where dogmatism was out of place and their unfortunate attempt to read the future without the aid of history and in the sole light of abstractions from the present." Malthus is famous for his theory of population and contributions to the Ricardian theory of rent.

John Stuart Mill was a follower of Ricardo as regards rents, profits and value.

### THE HISTORICAL SCHOOL

By the middle of the 19th century, a strong reaction came against the Classical school and these reactionists were grouped under a common name—Historical school. They maintained that deductive method was worthless and it should be supplemented by realistic inquiries. They proposed to apply through history a corrective and auxiliary to the analytical method. The ardent among them proposed the substitution of Economic History for economic theory because it was historical investigation that could solve the economic problem.

### THE SOCIALIST SCHOOL

The forerunners of utopian socialism were St. Simon, Fourier, Robert Owen, etc. Economic socialism attained notoriety through the teachings of Karl Marx and Engels. Karl Marx demonstrated that capital resulted from the spoliation of the wage-earning classes; that

labour is the source of value and has therefore a right to the whole produce of industry; that the wage-earners could not benefit from progress and the poor must get poorer in non-socialistic surroundings; and the reconstruction of the society was inevitable because the competitive system was self-destructive and commercial crisis was inherent in the competitive organisation. Since then, State-socialism is gaining support everywhere and of late there is found a reaction in the form of Syndicalism and Guild Socialism.

#### AFTER JOHN STUART MILL

The distinctive contribution of Cairnes was the conception of non-competing groups in the population and his consequent extension of the principles of international trade to the distribution of wealth. Mr. Stanley Jevons realised the technical potentialities of utilitarianism and with the aid of the calculus, he applied it to the foundations of economics. The Austrian school, the leading members of which were C. Menger, Wieser and Bohm-Bawerk, investigated the roots of value by penetrating into its psychological determinants. In this age, Fawcett, Bagehot, Sidgwick and Walker of the United States made remarkable contributions to the science.

Alfred Marshall of England and J. B. Clark of United States have "revealed the unity of the economic system and presented it as a coherent whole of inter-related parts, functioning in mutual dependence upon one another." The contributions of Marshall are the clear distinctions between the long and the short period, the doctrine of consumer's surplus, the doctrine of quasi-rent, and the expansion and refinement of the rent concept. The investigations of Edgeworth with the instrument of mathematics are highly educative. His important inquiries relate to international trade, the incidence of taxation, profits, and monopoly and differential charges.

## CHAPTER XX

### Economic Tendencies of the Age

The modern economic system though built up by private enterprise is being more and more attacked by governmental interference. Competition and highly developed division of labour are its characteristic features while science helps to develop and broaden modern industry by new inventions. However complicated the industrial organisation may be, the tendencies of the age are clearly discernible. A reaction against *laissez faire* has set in; the extension of public enterprise and the protection of labour by Governmental efforts are the ruling factors of the day. With all the conservative instincts of the world, it is being modernised and industrialised. Every industry is getting organised; the technique level of labour is rising; industrial inventions are working miracles; the tendency to small holdings movement is having universal support; new economic experiments are being made in Russia; land-problems are being tackled in a peculiar way; unskilled and untrained labour is being replaced by the highly qualified one; business literature is moulding human mind into different channels of thought contributing to the material progress of the world. A running review of the world economic movements will give the reader sufficient data to judge for himself in which way the wind is blowing. The following pages will bear a hasty analysis of the new economic developments and tendencies of the world and they will furnish an objective basis of estimating India's efforts for keeping pace with the materialistic progress of the competing nations of the world. It will be seen that in the scale of world materialism, India occupies not an enviable place. Before proceeding with the subject, let us see where the world stands with reference to its national wealth and national income. The following are the statistics :—

National Wealth (in 1913 Rupees) 1923.

	Population (in millions)	Total Amount (in millions).	Per Capita.
America	110	Rs. 690,000	Rs. 6,270
France	39	„ 173,700	„ 4,452
Germany	61	„ 165,000	„ 2,703
Great Britain	47	„ 210,000	„ 4,467
Italy	40	„ 63,750	„ 1,593
Japan	56	„ 45,000	„ 801
Russia	132	„ 135,000	„ 1,020
British India	247	„ 105,000	„ 423

## National Income (in 1913 Rupees) 1923

	Population (in millions)	Total Amount (in millions).	Per Capita.
America	110	Rs. 93,000	Rs. 843
France	39	„ 21,000	„ 537
Germany	61	„ 21,000	„ 342
Great Britain	47	„ 30,000	„ 636
Italy	40	„ 10,200	„ 255
Japan	56	„ 6000	„ 105
Russia	132	„ 16,800	„ 126
British India	247	„ 10,500	„ 42

## TECHNICAL AND AGRICULTURAL EDUCATION

France is highly developed in technical education and the State is doing its best for the spread of the same. The In France. Astier Act of July 1919 is the basis of the educational administration establishing compulsory and free classes for the working men and women. Agricultural, industrial and commercial educations are imparted by the State to develop the potentialities of the nation. Every working man and woman under 18 is to undergo three years' training in his or her technical line and the proprietors of factories or business concerns should see that their employees receive proper training, otherwise, they would be penalised by law. There are private schools started and patronised by the proprietors but recognised and financed by the French State. Technical education in France is after all an affair of the State. The French technical schools may be grouped under seven heads:—First, “les ecoles nationales des arts et metiers”; secondly, “les ecoles nationales professionnelles”; thirdly, “les ecoles pratiques de commerce et d’industrie”; fourthly, “les ecoles nationales d’agriculture”; fifthly, “les ecoles nationales d’agriculture” for women; sixthly, “les ecoles nationales veterinaire”; seventhly, there are horticultural schools. There is higher technical education in the universities. Electro-technical institutes, institutes of chemistry, æro-technical institution, a school of tannery—all are connected with various industries. Agricultural chemistry, watch-making, paper-making, etc., are taught in various universities.

Agricultural education is imparted liberally by the French State. The courses of instructions comprise zoology, botany, mineralogy, agricultural geology, physics and meteorology, agricultural chemistry, biological chemistry, etc., including also the special subjects such as horticulture, arboriculture, viticulture, sylviculture, entomology, sericulture, apiculture, pisciculture and technology. Arrangements are made both for practical and theoretical work. There are 3 national schools of agriculture, 26 agricultural *ecoles* in different parts and 7

institutions for specialised subjects, noted above. There are also schools for women.

In Germany, arrangements for vocational education are excellent.

In Germany. There are trade schools, industrial schools, factory schools, railway schools, mining schools, rural schools, and schools for working women. All these are free, compulsory and almost universal. There are common subjects taught in all these schools such as Civics and German. All the workmen and women who are under 18 and above 14 do attend and they all must have physical exercises such as gymnastics, sports, excursions, etc. In Germany there are schools of architecture, schools of metal industry, schools of manufacture, schools of weaving and spinning, schools of industrial arts and handicrafts, schools of mining, schools of navigation—all patronised and recognised by the State. There are also technical schools for metal industries including smithies, installations, instruments and machine tools, clocks and watches, precious metals; wood-work including carving and cabinet making, toys, carriages, musical instruments, willow-reeds; chemical industries including chemical engineering, paper manufacture, dyeing, soap making, etc.; ceramic industries including bricks and tiles, porcelain, glass, photography; leather industry; garment making; food-products. Prof. B. K. Sarkar rightly observes that the backbone of Industrial Germany is built up on the nurture furnished by these schools, which although bearing the modest name of a mere "schule" (*i. e.* a school as contrasted with a high school) have not failed to maintain a standard of tuition sufficiently high such as may enable the scholars to take charge of factories and workshops as responsible *Fachmaenner* or experts. There are also commercial schools in Germany which teach commercial and cultural subjects; even singing is taught in the college of commerce. In Germany, training of women in various industries is well-organised. Every woman's profession has an educational institution; even to get employment as a maid-servant, there will be the formality of producing a certificate of an appropriate school. There are house keeping schools where students under 14 are admitted to receive training in "domestic science". The entire course of domestic science includes cooking, and arranging food and the serving thereof; washing, rolling and ironing; taking care of house and furniture; making of useful household utensils; mending and repairing; sewing and tailoring; hygiene and sanitation; attending to infants and patients; gardening and floral decorations; art of living; general considerations on house keeping; civics, politics and economics; singing and music; gymnastics.

There are schools for "female industries" such as tailoring, hat-making, sewing of linen goods, embroidery. There are schools or

courses for training of women as medical assistants, as metalo-graphists, as chemists and illustrators. Arrangements for training in social service are also there. The courses in welfare studies include general and special laws of health; psychology; science of education; problems in national education; economics; social politics and social insurance; politics, law and civics; theory of welfare. The examinations are held by the State.

Agricultural education in Germany is also highly organised. There are 13 agricultural universities; schools for sons of peasants are 450 in number (in 1922). There are whole-time schools and part-time schools; there are 429 winter schools. There are schools of gardening, schools of land improvement; schools for animal-breeding; dairy schools; schools for alcohol, fermentation, brewery, sugar and milling and baking; schools for horse-shoeing; schools for agricultural office; forestry schools, etc.

The Vienna Chamber of Commerce with a view to offer higher training to persons interested, organises courses of lectures on economics and technical subjects. Arrangements are also made by the Vienna Chamber for training in technical industries including shoe-making, carpentry, book-keeping, carriages, manipulation of metals and electrical technology.

There are also many technical Journals in the West which preach new ideas and inventions, helpful for particular commercial and manufacturing businessmen and workers. Every trade there has its own journal and the growth of economic literature is of tremendous help to industrial prosperity.

Business literature is as important as industrial research is in the economic prosperity of a nation. Industrial research can be called a new agent in production. Every economic enterprise, run on technical lines and industrial research, opens up new possibilities. Industrial research helps inventions which on the other hand help business. New methods of manufacture and new methods of transportation revolutionise the economic world. An eminent economist says—“Industrial research has been achieving wonderful results in human inventiveness and brain-power. But these acquire a significance solely because they serve to make the life of the people, the teeming millions, less disagreeable and more happy. And while a great social purpose is thus being served by engineering technology and chemistry, be it noted also that these achievements have a substantial value on the world market. The inventions, furnished with economics as they are, enable the merchants to place the goods on the trade cheaper than before and than others who do not happen to be armed with the same. The capacity for competing with other nations rests thus ultimately in the quality, quantity and variety of scientific investiga-

tion applied to the problem of economic development or in other words, industrial research."

The State in India is negligent and miserly in imparting professional training to the children of the soil. The In India. people are equally ignorant of the value of highly trained labour because complaints have been heard that in technical schools, the students do not come and receive training as cheerfully as they should. The dignity of labour is not yet fully recognised; the magic of trained and efficient labour is not fully appreciated by Indians. There is a craze for literary education whereas industries are suffering for want of trained people. Even if there is the will, there is no way as opportunities afforded by the State are not upto the mark. India of course is pulsating with a new life and her children are feeling the need of technical schools for every trade and industry. The following statistical informations will show where India stands in comparative pedagogics:—

#### State Expenses on Education in British India (1921-22).

From Provincial Revenues	...	...	Rs. 9,02,30,028
From Municipal Funds	...	...	„ 79,05,063
From Local Funds	...	...	„ 1,68,26,087
Total			Rs. 11,49,61,178

For 1926-27, the total is Rs. 12,50,00,000. State expenses in British India in 1926 constitute 8 annas per head of population whereas France spends Rs. 5-5-3, Japan Rs. 2-4-3, Italy Rs. 4, Germany Rs. 17-9, Russia Rs. 0-12-9, America Re. 29-6-4 and Great Britain Rs. 17-5-4 per head.

#### PROFESSIONAL AND TECHNICAL EDUCATION IN INDIA (1924).

##### Colleges:—

	Institutions	Scholars.
Law	11	7,227
Medicine	8	3,873
Teaching	22	991
Engineering	6	1,486
Agriculture	5	567
Commerce	10	1,330
Forestry	2	169
Veterinary	3	292
	67	15,935

*Schools:—*

	Institutions	Scholars.
Arts	9	1,711
Law	2	124
Medical	26	4,761
Normal	798	21,332
Engineering	12	1,224
Technical and Industrial	316	14,483
Commerce	131	7,401
Agriculture	15	381
Reformatory	8	1,190
Defectives	28	687
	1,345	53,314

Thus colleges and schools bring the figure to 1,412 and the scholars to 69,249.

The scholars constitute  $\frac{69,249}{247,097,651} \times 100\%$

i. e., '027% of the total population whereas in Japan there is 1·6%, in Germany 1·2%, in America '61%, in Russia '38% and in Great Britain 2% of the total population.

### LAND PROBLEMS

Land problems are always tackled by legislation. In land-reform, Denmark's example is the best. There were too many petty-land-owners in Denmark and they were faced with the problem of getting credit as the value of their holdings was extremely low. The Government came forward and founded credit banks. The Government set up many public companies to buy out big Zemindaries and carve them into smaller farms. The Government in many cases appropriated 20 per cent. of the value realised by the sale which was spent partly to indemnify the original proprietor, partly for loans to new small holders and partly to create fresh small holdings. New owners had to observe certain rules in regard to cultivation, sale, etc., not allowing sub-division, amalgamation or division. The Danish land-laws create small holdings and the legislation bears a distant family likeness to the Bolshevik experiments in Soviet Russia because at every stage, the Danish small holder feels that the land belongs ultimately to the nation.

In France, peasant proprietorship is the chief feature of land holding. There is also the Metayage system wherein the land belongs to the landlord and is cultivated by the peasant, the landlord contributing a part of the capital and getting about half the produce from the cultivator. There are also tenants farming independently of the landlords. But "one can describe France as the country of millions

of peasant landholders where the cultivators are socially akin to the working rather than to the employing class." The agriculturists of France obtain loans, one private and the other State. Private Credit Associations are known as the Durand rural banks, introduced through the energetic efforts of M. Durand on the Raiffeisen principles, and limited to small areas, the members knowing one another's affairs and the liabilities being unlimited for the individuals. The State-loans are given through "credit Agricole," functioning under the Ministry of Agriculture. The French State offers loans at very low rates because "it has at its disposal the capital sum of 40 million francs offered by the "Banque de France," the government banking institution, without any interest whatsoever. The government obtains, moreover, from the same source an annual grant of between 2 and 6 million francs, specially for the same purpose. Thus, "while at the bottom the French system of agricultural credit is essentially nothing but local mutuality, *i.e.*, personal initiative and interdependence of intimate acquaintances, the principle at the top is essentially governmental philanthropy, which in current philosophy is but an aspect of 'étatisme' or State-patriotism."

In Britain, the Tribunal appointed by the Bonar-Law Ministry In Britain. to examine the causes of agricultural prosperity submitted its report to the Macdonald Ministry. The Tribunal came to the finding that in order to increase the agricultural prosperity of Great Britain, vast outlays by the State are necessary. Peasant proprietorship was recommended to be the best system. Sir William Ashley who was one of the members of the Tribunal found that the next best alternative was to keep the tenants as secure as possible in their tenure and to guarantee that security in no unequivocal manner. The Tribunal further recommended the splitting of large estates into small plots because, in its opinion, the system of family farms operated by a man and his family without hired labour is the most ideal not only for England but for everywhere and the small holding should be of the size whereby a decent standard of life can be maintained. All these projects involve redistribution of land through compulsory purchase or hiring. Herein is the triumph of communistic ideals. The small holdings are advocated by the Tribunal on the grounds that they keep a number of people on the land in conditions which render them reasonably happy and that they offer prospects to the agricultural labourer.

From the trend of economic legislations all over the world we Future for small find that the future is for the small holdings. Confiscation and redistribution on small holdings are being holdings. made in the Slavic States. The Tchechoslovakian government is confiscating and redistributing and about 30 per

cent. of lands have been redistributed and innumerable landowners have been dispossessed of. The kingdoms of Rumania and Jugoslavia are also following the same path. The new tenure makes over the lands to the cultivators who are thus emancipated from the hold of the landlord. Peasant proprietorship of small sizes is thus introduced. In England, the Small Holdings Act was passed in 1908. In Denmark, such act was passed in 1899. "Down to 1914, the British Government spent £ 5,250,000 in order to establish 14,000 new small holders. The State in Denmark advanced about £ 3,000,000 down to 1922 and 9860 small holdings were created. By 1914, the German Government spent £ 12,000,000 and succeeded in establishing 20,000 Colonists." Now Russia's experiments in governmental landowning or land control are not new in Europe and effective small holdings policy which is being followed all over Europe is a matter of social justice for which the socialists are fighting and agitating. What is a small holding ? In Denmark, 44 bighas are fixed as the minimum size. In England, the standard was 175 bighas but there is a tendency to raise the standard. In Germany, the area of 119 bighas is fixed to constitute a small holding.

An examination of the land tenures gives us many forms, the chief of which are Metayage system, peasant proprietorship and landlordism. Nationalisation and socialisation of land is the aim of the Communists. The Metayage system devises payment of rent in kind. The tenant pays harvest to the landlord as rent; the tenant works and sometimes hires labourers; the landlord on the other hand supplies land and capital. This system creates a common interest between the landlord and the tenant; it is extremely helpful for poor tenants as capital is provided by the landlords; the landlord is supposed to take keen interest in the cultivation and the welfare of the tenants as his rents are to depend upon successful cultivation. But the system is very much tedious and risky on the part of landlords and unsatisfactory on the part of enterprising and ambitious tenants. The system of peasant proprietorship prevails in Belgium, France and in certain parts of the United States. The peasant proprietorship is a great stimulus and makes the peasants industrious, hardworking and wealthy. This proprietorship in the hands of the peasants makes them a force in the political and social lives of the country. Critics contend that the peasants are poor and inefficient, therefore peasant proprietorship is not a wholesome condition as capital and efficiency are essential for improving agriculture. Russia is experimenting on nationalisation and socialisation of agriculture. The days of landlordism with all its manifest advantages are at a discount because of the surging tide of social-democracy sweeping away all the existing systems based on capital.

In India prevail the Permanent Settlement, Talukdari Settlement and Raitwari Settlement. But the State is always interfering in the interest of the tenants. The tenancy legislations of India clearly show that the State will regulate the relations of landlords and tenants, even infringing the so-called inviolable rights and proprietorship of the Zemindars of India.

### INDUSTRIALISATION

The modern age is industrialising the whole world. In Italy. The economic depression and crisis in Italy brought about by the Great War have been counteracted by Mussolini's policy of industrialisation. Mussolini's shipping policy has brought about economic regeneration in Italy. In 1920, Italy built altogether 150,000 tons of shipping. There are three ship building centres in Italy. Venice is now a big commercial centre. The city of Milan is dotted over with factories. Italy's great industries are connected with automobiles, lorries, wagons, etc. A part of the railways has been electrified and the water power resources of Northern Italy are engaging the attention and the prospects of electrical industry in Italy are great. The "Fiat" works of motor cars have earned great industrial reputation for Italy. The Fiat works also manufacture airships. There are spinning and weaving factories and the Jute mills are on the increase. Silk is there an important industry. Though Italy is essentially an agricultural country, her attempts at industrialisation have attained no small measure of success.

Turkey is also industrialising herself. In Turkey. The coal and mining resources of Turkey are immense. Turkey by following a national policy has expelled foreign control in navigation and this has given fillip to her shipping trade. In the domain of banking, the Imperial Ottoman Bank is opening up a new vista for her in the forest of financial problems. Vigorous national policy is responsible for the small measure of success that Turkey has attained in "industrialisation" and this tendency to industry is on the increase.

Japan is reconstructing herself on industrial lines. In Japan. The commercial assets of Japan are her raw silk and the industry of the spinning and weaving of cotton. In the business production and organisation, Japan employs the latest technical improvements. Large-scale production is the feature of her industrial life. In chemical industries, Japan is making progress. Japan is modernising herself in household and municipal arrangements: electricity is being utilised for domestic cooking; labour-saving appliances are in greater evidence; heavy expenses are budgetted for road building. "Japan is a civilising agent in the Far

East." Labour problem is growing in Japan and this psychology of apprehension of "working class complex" is responsible for the terrorisation of the communists.

Thus we find that every new nation is industrialising herself with due regard to the interests of agriculture. In India,

Germany, Britain and America, industrialisation, aided by science, is immensely developed and their problems are to counteract the evils attendant on industrialisation. Those problems are being tackled by trustification, co-operative method and joint stock principles. The tide of industrialisation that is sweeping the world has also caught India. The growth of Swadeshi movement in India has helped the establishment of Indian industries on modern lines with a view to expel the British goods from the Indian market. The declared objective of swadeshi movement is an economic blockade of British goods to gain some political concession but it has unconsciously functioned as a more or less "self-sufficient and self-determined economic agency in the world's system of creative materialism." Great Britain also has spent her capital and resources in industrialising India with a view to compete in the world market and eke out a decent existence for her (Britain's) nationals. Thus the efforts of industrialising India come both from the Indians and foreigners. Jute industry in Bengal, woollen works in the United Provinces and Cotton mills in Bombay—they all represent the big industries of Modern India. Iron and steel industries are being run on, according to modern technics, in Jamshedpur, Kulti, Asansol and Mysore. Workshops for nails, tools, screws, agricultural machinery and implements have sprung up in the neighbourhood. Manganese is mined in the Central Provinces and there are manganese works in Mysore, Bombay and Madras. Chemical and pharmaceutical works are in Bombay, Calcutta and other places. Glass works have been set up in the Punjab, the U. P., Bombay and Calcutta. The pencil factories of Bombay and Bengal, porcelain works in Bengal and the Central Provinces, enamel and soap and perfumeries—all are winning recognition. Paper mills are on the increase. Match-factories as a small industry proposition are striking root in India. The sugar mills of India are fair in number.

The following statistical informations are culled from B. K. Sarkar's Economic Developments:—The geographical data of Indian industrialism can be grasped likewise from a picture of distribution of modern factories and working men.

In 1919 there were 5952 factories in all India. Of these 640 belonged to the Indian States, Baroda alone claiming 203. The working men and women numbered 1,367,136. There were about

290 hands employed per factory. In the Indian States the average employment was lower, namely, 140.

Of all the hands nearly 40 per cent. were employed by the textile industry. The cotton mills had 3,07,000 and the jute mills 2,76,000.

The number of joint stock enterprises in all India in 1920 was 3605. Of these about half, precisely 1742 belonged to Bengal. Bombay possessed 740; Madras 435 and the United Provinces 159. Of the Indian States Mysore had 79, Baroda 41, Gwalior 30, and Indore 18.

Bengal possessed  $16\frac{1}{4}$  per cent. of all the factories in India. There were 4,32,515 hands employed in its nearly 1000 factories. The number of working men and women in Bengal was one-third of the total factory hands in India.

Coal is mined almost exclusively in Bengal, Bihar and Chhota-Nagpur. There were 196 collieries in these regions in 1919.

Engineering works were distributed in the following manner: 105 in Bengal, 24 in Bombay, 16 in Bihar and Orissa, 9 in Madras and 7 in the United Provinces. The total employment was nearly 500,000. Then there were 70 railway and tramway works employing about 90,000 hands while the 10 dockyards employed 16,000.

Mica was mined in 19 centres in Bihar. Employment 8,675.

Of the larger printing works Madras and Bombay each had 29. Bengal possessed 21 and the United Provinces 10. The average employment was 654.

The 3 paperworks in Bengal employed 4479 and the 3 in Bombay 300 hands.

Bengal had 8 tobacco works, Bihar 4 and Madras 3. Total employment 5,028.

The sugar factories were 44 in number, distributed over Bihar, the United Provinces and Madras. Total employment 9,562.

There were 84 oil-mills in Bengal with an employment of 3,470.

Rice mills were distributed as follows: 135 in Madras (employment 7,694), 108 in Bengal (employment 4,503).

The distribution of flour mills was as follows: 13 in Bombay, 10 in the Punjab and 9 in Bengal. Total employment 3,857.

Bricks and tiles were manufactured in Bengal in 107 works; in the United Provinces in 38, in Madras in 31, in the Punjab in 23 and in Bombay in 21. Total employment 21,088.

There were 42 stone-works in Bihar, 8 in the United Provinces 3 in Rajputana and 2 in Central India.

Bihar, Bengal and the United Provinces each had 3 porcelain works. The nine factories employed 4,824 hands.

There were 64 silk factories in Bengal, 2 in Kashmir and 2 in Bombay. Total employment 7,963.

There were 5 factories for carpets and shawls in the United Provinces, 8 in the Punjab and 9 in Kashmir. Average employment 451.

There were 13 rope works in Travancore, 11 in Bengal and 6 in Madras. Total employment 5,630.

There were 55 leather works in Madras, 18 in Bengal, 15 in Bombay and 10 in the United Provinces. In these works 13,619 hands were employed, giving an average of 139.

There were 55 lace works in Bihar and 24 in the United Provinces. Average employment 73.

Kerosene tinning was done in 8 factories in Bengal; Madras and Bombay each had 7 works. Average employment 319.

The above statistics, while indicating the new industrial geography of India, will not have failed at the same time to give an idea of the average size of the works in terms of the hands employed. A few more figures for 1919 are here added in connection with the size question.

There were 16 artillery works of the government. Total employment 27,000.

There were altogether 13 chemical works with an employment of 3,000 and 26 dye and paint works with 5000. Glass was manufactured in 10 factories employing 1,422 persons.

Small cutlery works were 7 in number employing about 1,100 hands. Nearly 2300 were employed in 46 metal works. Modern carpentry accounted for 11 works with an average employment of 100. In 31 carriage building works 4,267 persons were employed.

There were 15 coffee-works with an employment of 4,066, 19 breweries with 2,307 and 15 distilleries with 1445.

The tea-plantations (117 in Bengal, 36 in Assam and 9 in Madras) employed about 700,000 hands."

The capital invested in Calcutta Soap Works is 5 lakhs of Rupees. The Bangaluxmi Cotton Mill is worked at a capital of 18 lakhs.

The Bengal Chemical and Pharmaceutical Works are operated with a capital of 25 lakhs.

The Sassoon United Mills of Bombay possess a capital of 10 crores. The same limit has been reached and exceeded by the Tata Iron and Steel Works. The Tata Power Co. is operated with 9 crores and the Tata Hydro-electric Power Supplying Co., with 3 crores. The Tatas possess a sugar corporation which is operated within 5 crores.

Among the 85 jute mills there is only one Indian concern. The proprietor, Hukum Chand, has invested in it a capital of 80 lakhs.

These are a few instances of Swadeshi in finance.

Most of the other jute mills are operated with capital ranging between 20 and 25 lakhs on the average. The Howrah Jute Mills command 56½ lakhs while the Orient and Anglo-India each 1 crore.

The United Steel Corporation of Asia command 20 crores, Bengal Iron Co. 11½ crores.

The Buckingham and Carnatic Mills (Cotton) of Madras are operated with 2½ crores, the New Victoria Co. (woollen) of Cawnpur with 5 crores, Agra United Mills with 1½ crores, The Ganges Manufacturing Co. with 1½ crores, the Consolidated Tea and Lands Co. of Assam with 3 crores, the Mysore Gold Mining Co. with 91½ lakhs.

In 1922 there were registered 72 joint stock concerns in India. The total authorised capital was about 15 crores. Average 20 lakhs. The promoters were mostly non-Indian. Without trying to be dogmatic, perhaps this foreign average may be set against the normal Swadeshi average of 20,000. That is, Indian capitalism should seem to be almost 1/100th as strong as British capitalism in India.

There is an interesting calculation made by Sir Jadu Nath Sarkar that in 1913, the amount of foreign capital invested could be fixed at something above 518½ crores while that to be traced mainly to Indian sources could not account for more than 24½ crores.

In the path of full-fledged industrialisation of India, there are obvious difficulties. Firstly, India is a land of agriculture and cottage industries and the social traditions nourished by the agricultural civilisation are there to counteract the forces of Industrialism. Secondly, the Government of India is not "nationalistic" and cannot and does not help industrialisation by necessary economic legislation. Thirdly, there is much competition in India and political dependence is a clog on the wheel of industrialisation. Fourthly, there are no technical schools and necessary patronage and stimulus are not forthcoming from the State. Fifthly, the capital in India is extremely shy. Sixthly, in young industrial countries such as India, first-class machineries, complicated implements and chemicals of finer qualities are not manufactured because they do not become profitable as their field is limited but in this age, industrialisation cannot progress except with the help of scientific machineries. "With all these difficulties, "Indian" industrialism is already a force in the industrial and commercial system of the world. No matter whether the capital and the direction be Indian or foreign and however small in number be the middling and giant concerns, most of the economic and social problems of modern production and distribution are fully entrenched there. Besides from an absolute standpoint the proverbial statement is significant which says that in the world-scale India already

occupies the eighth place as an industrial power while being the first in the tropics."

### IN RUSSIA

Russia of to-day is a laboratory of economic experiments, or to put it unsympathetically, a museum of economic curiosities. A study of the economic re-organisation of Russia will afford the key to the latest economic doctrines of the age. In Russia, industry occupies a subordinate place to agriculture. In the economic year 1926-27, of the 82·7 millions of the working population of the U. S. S. R., only 2·8 millions were operatives and employees in manufacturing industry and mining, 1·3 millions in transport, 300,000 in the building industry, and 1·9 millions in domestic industry and minor manual occupations whereas in agriculture, 71·7 millions were engaged. The Great War, the revolution and civil war dislocated industry considerably but the industrial reorganisation was taken up by the State with so much avidity that at the end of the first decade of Soviet rule, industrial production had in general regained the pre-war level. The following official statistics will provide necessary informations :—

#### INDUSTRIAL PRODUCTION IN THE YEAR 1927-28.

Branches of Industry.	Absolute production.	Percentages as compared with 1913.
Coal-mining ... (Tons)	37,100,000	128·4
Petroleum ... ,,	10,130,000	110·6
Production of		
Iron ores ... ,,	6,129,000	66·5
Cast iron ... ,,	2,990,000	85·2
Martin Steel ... ,,	3,460,000	82·3
Rolling-Mill		
Production ... ,,	3,830,000	90·8
Cotton goods (thousand Metres)	2,740,000	94·5
Woollen goods ,,	854,000	120·0
Sugar ... ... (Tons)	1,593,000	69·0
Salt ... ... ,,	2,223,000	114·2

The industries are nationalised and the management is centralised and vested in the economic councils of the U. S. S. R., the various republics of the union and the different provinces. Groups of enterprises are combined in trusts. The smallest trusts are controlled by the provincial economic councils; the trusts covering the territory of a whole republic are controlled by the supreme economic council of that republic; trusts whose operations extend throughout the whole of the U. S. S. R. are managed by its supreme Economic Council.

"In the year 1927, there were in the U. S. S. R., 819 trusts, enrolling 2915 factories, workshops and mines and employing 1,470,852 workers ; of these trusts, 584 have only a local importance, 162 are trusts extending throughout the territory of individual republics and 73 are nation-wide. . . . The profits made by the trusts are distributed as follows :—75 per cent. go to the Supreme Economic Council ; 20 per cent. are placed in a reserve fund ; and 5 per cent. contribute to form a fund for the improvement of the condition of the workers and employees. Any losses made by the trusts are covered by State-subsidies." The Soviet State has spent in 1924–25 upon industrial reconstruction 339·5 millions of roubles ; during 1925–26, 779 millions of roubles ; during 1926–27, 1090 millions of roubles ; during 1927–28, 1200 millions of roubles ; during 1928–29, 1515 millions of roubles. The Five Year Plan instituted by the Supreme Economic Council provides for the investment in industry during the next five years of 16·2 milliards of roubles, with the proviso that simultaneously a further sum of from 15 to 20 milliards of roubles shall be invested in other economic fields ( transport, electrification, housing, agriculture ). Machinery and technical plant to the value of several milliards of roubles is also to be imported from abroad.

The Land Code of 1922 declares that the right of private property in land, in natural resources, rivers, lakes and forests within the area of the U. S. S. R., is abolished once for all and all the land in the country, to whomsoever it may have belonged and however it may be used, is State property. The State allots lands gratuitously for the use of actual cultivators and the right to the use of land kept under cultivation is not terminable. The purchase, sale, testamentary disposition or giving away of land and the mortgaging of it are prohibited. "The Land Code leaves it open to land co-operatives and individual holders to cultivate the land in any of the following ways : (a) communal cultivation, in which land is managed by a land Co-operative and is allotted among the members after the lapse of three sowing periods (9 to 12 years) ; (b) partially individual cultivation, in which all the arable land of the individual farmer is compacted into an independent farming enterprise, while the peasant farmstead remains within the village settlement ; (c) exclusively individual cultivation in which the farm is cut completely adrift from the village community ; (d) collective cultivation, in which the land is tilled collectively by the peasants."

Russian agriculture is being intensified and industrialised. The elaboration of agricultural products and the opening of new markets are being earnestly taken up by the government. The policy of the Soviet Government in the countryside is to consult the interests of the poor peasants in preference to the "Kulaks" (well-to-do peasants).

There has been effected a general equalisation of the size of farms. The Soviet policy has always stood for the welfare of the workers : introduction of eight-hours day for all wage-earners ; six-hours day for young persons from 16 to 18 ; 6 hours day for underground workers ; 4 hours day for young underground workers under 16 ; 6 hours day for brain workers. There is compulsory weekly holiday of 42 consecutive hours and a fortnight's holiday each year for all workers and employees. In the matter of labour protection, the Soviet policy is satisfactory. A working woman in the family way gets a holiday of eight weeks before and eight weeks after delivery. There are creches where the women workers can leave their children to be cared for during working hours. In 1927, when the total number of wage workers was 10·5 millions, the number of insured was 8·9 millions ; there is insurance against illness, unemployment, accident, disablement and death. The trade unions are also nationalised.

The State Planning Commission in its report of 1926 declares its objective in a clear language :—“ Inasmuch as we are realising a purposive economy, we endeavour first of all, to elaborate the national economy in such a way that, thanks to the co-ordination of the various parts and with the aid of scientific methods of production and distribution, with due adoption to the objective material resources and to the amount of available labour power, it will be possible to combine the maximum of production with the minimum of expenditure in the shortest conceivable time. Secondly, the entire State system is so constructed that the frictionless course of the whole mechanism without crisis and catastrophes will be ensured, while the whole working collectivity participates consciously in the aggregate social production and takes into account the ways by which the extent to which dead nature can be subjected to its needs.” M. A. Yugoff in his “Economic Trends in Soviet Russia” points out that the scheme for establishing a purposive economy in the Soviet Union is constructed as follows :—“ Each of the various republics that combine to form the union has its own State Planning Commission, which drafts a scheme for the economic development of its own area. The general plan for the U. S. S. R. is drafted by the State Planning Commission of the Soviet Union. The last-named authority is not subordinated to any of the people's commissariats ; and should any difference of opinion arise between the State Planning Commission and economic commissariats the matter has to be submitted to the highest economic authority of the union, the Council for Labour and Defence, whose decisions are binding upon all the State authorities. The State Planning Commission of the Soviet Union acting in accordance with the direction given by the Communist Party and making use of the economic and statistical data at its disposal, has drafted two economic plans, a five

year plan and a fifteen year plan. The Five Year Plan comprises the economic measures in the domain of re-construction, new construction, industrialisation and intensification. The Fifteen Year Plan, far more comprehensive, comprises the measures by which is to be achieved the transformation of economic life into a thoroughly socialised system. The drafting of both plans has been guided by the following considerations : the movement of population, and the social composition of the population ; the national income ; the accumulation of capital ; the amount of investments ; production in industry and agriculture ; the circulation of commodities ; foreign trade ; the issue of money ; the budget ; taxes ; the total consumption ; the wages of labour. All these are considered in relation to the aggregate of economic life and in relation to individual departments of economic life and individual districts. The whole is elaborated into a unified system, a plan for the totality of Russian economic life. The schemes thus elaborated have an obligatory character and serve as guides."

The chief characteristics of a socialist State, which Russia is aiming at, are as follows : socialisation of the means of production, factories, mines and land ; abolition of the exploitation of man by man ; organisation of national economy in a way to promote the highest development of the forces of production and the most complete satisfaction of the needs of the population at large ; reorganisation of social relations entered into in the process of production upon the basis of the co-operation of the great common-wealth of the active workers ; management of the political functions of the community by the active workers.

## CHAPTER XXI

### Economic Features of India

In discussing the economic features of India, we are struck by one factor, the predominantly rural character of the population. India lives in villages and Europe in towns\*. The villagers generally live in mud or bamboo houses, huddled together. The holdings of the farmer are his means of livelihood. "Most of the 500,000 villages have not yet been touched by metalled roads or railways; post offices are many miles apart, and telegraph offices still more distant from each other." Circumstances have helped to maintain a "self-sufficing type of agriculture". The rural progress is handicapped by the following factors; firstly, the tillers follow traditional methods upon holdings and the scientific agricultural methods are viewed with suspicion; secondly, lack of communications and of organised trade and commerce do not raise the standard of life and the farmers are prompted by local needs and are not actuated by any motive of trading with distant customers which would have widened the outlook of the villagers; thirdly, the holdings of the farmers are small and scattered over, which do not help to materialise the standard of high living and "the typical agriculturist is still the man who possesses a pair of bullocks and cultivates a few acres with the assistance of his family and of occasional hired labour". The economic aspect of the caste system is that the higher castes are not applying themselves to the agricultural conditions of the villages; caste system teaches that the artisan castes are to be wedded to their ancestral craft and thus far it is good; but the caste-system prevents the dignity

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\* "In England and Wales four-fifths of the people live in towns. India has many ancient and historic cities, but, taken all together, they hold but a tiny fraction of her enormous population. It may, perhaps, be assumed that the first approach to urban conditions occurs when ten thousand people reside together in one place; for on that scale questions of water-supply and lighting and drainage—the material things which awake men to a consciousness of their common needs as neighbours—begin to be a serious concern. On that basis we may say that 226 out of 244 millions of people in British India live a rural life; and the proportion of those who ever give a thought to matters beyond the horizon of their villages is very small. Agriculture is the one great occupation of the people. In normal times a highly industrialised country like England gives 58 persons out of every hundred to industry, and only 8 to agriculture. But India gives out of every hundred 71 to agriculture or pasture, 12 to industry, 5 to trade, 2 to domestic service, 1 to the profession, and 1 to Government service or the Army. In the whole of India the soil supports 226 out of 315 millions, and 208 millions of them get their living directly by, or depend directly upon the cultivation of their own or other fields."—*The Report of the Indian Statutory Commission* (1929).

of higher castes from resorting to manual labour and working in the fields and this psychology of indifference born of the caste-system is economically suicidal as educated classes being shut up against manual work for false sense of dignity are thereby making no constructive contributions to the progress of the countryside. The economic effects of social and religious customs by marrying the sons and daughters at a ridiculously low age and by expending extravagantly on ceremonies and rites, thought to be imperative for social customs and religious conceptions (such as weddings, funerals, religious festivals), do all eat up the financial strength of the villagers.

The predominance of agriculture is evident from the fact that the last Indian Census enumerated that out of 319 millions of people in India, 32 $\frac{1}{2}$  millions only were counted in urban areas. This is 10.2 per cent. of the whole. The average annual income per head of the Indian population is Rs. 20 according to Dadabhai Naoroji in 1870, Rs. 17 according to Sir David Barbour in 1882, Rs. 30 according to Lord Curzon in 1901, Rs. 50 according to Hon. E. M. Cook in 1911, and Rs. 108 according to the Indian Statutory Commission. In any case, the figures show the insolvency of the Indian population. The poverty of India is thus a grim fact. There are millions of agriculturists who go through life on insufficient food and the situation is all the more tragic that "they are born in debt, live in debt and die in debt". The prime need of India is food and more food.

In analysing the causes of agricultural indebtedness which is shocking, we get at many interesting features of the Rural indebtedness. village society. The first cause of debt is their poverty.

With the exception of land which is small and is also subject to depreciation, they do not possess anything or any kind of income. There is the capricious climate, equally capricious landlord and still more capricious system of land-tenure—all these disturb the tillers of the soil. There is also the improvidence of the tillers who show short-sightedness in counting future income and foolishly expend or misapply money; the consequences of obligations foolishly contracted are forgotten and the expenditures on marriage and other festivals go on. In majority of the cases, the ryots suffer from inherited debt. Cultivation has nearly reached its limit but the population is increasing and debt is the only resource out of it; the ryots do not think nor are they made to think that things can shape in a better way; they accept the existing order as inevitable; they bemoan and lament and curse the God of Destiny. The growth of an inferior class of money lenders dealing at exorbitant rates of interest helps the ryots to live in debt in perpetuity and without any hope of redemption. The facilities of contracting debts for unproduc-

tive purposes always land the debtors in difficulties. The debts are never paid off. The money-lenders lend money without scrutinising the object of loans because it is not in their interest to do so. Moreover, the produce of land is not sufficient for the needs of the tillers. The rents and the revenues as the case may be in the case of ryots are to be rigidly paid up and the debts are to be resorted to. Debts become long-standing and are often made up of compound interest and fresh loans complicate the accounts; a ryot, thus embarrassed, can seldom extricate himself, "his exertion may be compared to the hellish torments of Sisyphus who no sooner rolled his burthen to the summit of the hill than it fell back upon him with redoubled violence." The money-lender class is increasing in India because there are facilities of law for the recovery of debt and the ryots are easy victims in their game of exploitation. Capital is attracted to the business of agricultural money-lending because of the dearth of other industries in the country. The villagers who have saved a little money desire to earn an independent living, preferably in the places where they are known and the money-lending and not investment is thought to be a safe and paying proposition. The increase of inferior kind of money-lending business has been a menace to the ryots and Sir G. Wingate rightly holds :—

"The prosperity of the ryot is no longer necessary to the pros-

perity of the village money-lender. The latter has  
Money-lending business. no longer occasion to trust to the good faith or  
honesty of the former. Mutual confidence and  
good-will have been succeeded by mutual distrust and dislike. The  
money-lender has the ever-ready expedient of a suit at law to obtain  
complete command over the person and property of his debtor. It  
becomes the interest of the former to reduce the latter to a state of  
hopeless indebtedness in order that he may be able to appropriate the  
whole fruits of his industry beyond what is indispensable to a mere  
existence. This he is enabled without difficulty to do. So long as yet  
not much involved, the money-lender is ready to afford him the means  
of indulging in any extravagance without troubling him at all about  
future repayment. The debt may lie over and he may choose his own  
time for repayment. The simple and thoughtless ryot is easily entan-  
gled into the snare, and only becomes aware of his folly when the  
lenders are fairly around him and escape is impossible. From that  
day forward he becomes the bondsman of his creditor. The latter  
takes care that he shall seldom do more than reduce the interest of  
his debt. Do what he will, the poor ryot can never get rid of the  
principal. He toils that another may rest, and sows that another  
may reap. Hope deserts and despair possesses him. The virtues of  
a free man are supplanted by the vices of a slave. He feels himself

to be the victim of injustice and tries to revenge himself by cheating his oppressors. He cannot get into a worse position than he already occupies and becomes reckless. His great endeavour is to despoil his enemies, the money-lenders, by borrowing continually. When he has got all that he can from one, it is a triumph to him if by any amount of lies and false promises he can get something more from another. When he has two creditors there is a chance of their fighting with each other, and that during the fray he may be able to snatch a portion of the spoil from both."

When the debt reaches an amount for which the ryot's personal security is not sufficient, there is the mortgage of land. Sometimes a joint security of another ryot of substance is added to the personal bond. Before the mortgage of land, there is the mortgage of the debtor's house, bullocks, crops, cart and other movable property. When the mortgage of land is completed, the right of occupancy is transferred to the creditor. All these show where the ryots stand. The "foreign usurer" is the product of diseased condition of the community.

The origin of debt among the ryots, we find, is traceable to various causes, among which the prominent are the failure of crops from drought, expenditure on marriage and other ceremonies, general thriftlessness, an improvident use of sudden inflations of credit, the exactations of an oppressive body of middlemen, administrative errors such as unsuitable revenue settlements, loans with exorbitant rate of interest, the menacing poverty and the system of land tenure. The ryots are deficient in the qualities of fore-thought, energy and self-reliance; the extravagant habits encouraged by temporary prosperity are not easily forsaken and bad seasons and collapse in prices push them into debt; indebtedness becomes hopeless and inextricable and their cherished rights in the holdings are invaded by the greedy money-lenders. Says Mr. Darling :—"The money-lender is everywhere the evil genius of the cultivator, exploiting him when he is prosperous and enslaving him when he is poor. Economic freedom is a condition precedent to progress and to the Indian cultivation, no freedom is possible till the power of the money-lender is broken." Mr. Darling in "The Punjab Peasant in Prosperity and Debt" gives the following facts :—(A) only 17 per cent. are free from debt, (B) net mortgage debt is not more than 40 per cent. of the whole, (C) the average debt per indebted proprietor is Rs. 463, (D) total debt represents twelve times the land revenue paid by all concerned, whether indebted or not. Mr. Calvert in his book "The Wealth and Welfare of the Punjab" discovered 40,000 money-lenders in the Punjab out of a population of 25 millions. Mr. Rutherford in "Modern India" gives the following informations :—

"Sir Frederick Nicholson estimated the total debt of the rural population in the Madras Presidency in 1895 at 45 crores, which worked out at an average of 13 rupees per head of the population. The Famine Commission of 1901 found that at least one-fourth of the cultivators of the Bombay Presidency have lost possession of their lands, that less than a fifth are free from debt, and that the remainder are indebted to a greater or less extent. The Material and Moral Progress Report for 1919 aggregated the indebtedness of the Punjab at about 30 millions sterling.

The speed at which the money-lenders have expropriated the peasantry may be judged by the following figures from the Punjab : From 1866 to 1874 sales averaged about 88,000 acres a year, and in the subsequent quinquennial periods 93,000, 160,000, 310,000, and 338,000 acres a year.

The rate of interest charged by these leeches varies from 15 to 50 per cent. compound interest. But yet the tale of expropriation is not all told, for the sowcar (money-lender) has taken advantage of the indebtedness, unbusinesslikeness, commercial helplessness, and ignorance of the cultivator by combining the business of grain merchant with that of money-lender, buying the ryot's harvest at low prices when there is a glut in the market and selling to the big exporter, who prefers to buy in bulk from him rather than from the individual cultivator, who can only sell in small quantities. The money-lender thus becomes the economic dictator of the village, monopolising the position of buyer and lender, exacting his own terms, and leaving only an infinitesimal part of the profits to the producers."

Mr. Darling gives the following statistics :-

Date	District	Percentage free from Debt.
1874	Central Provinces	... 60
1888	The tenantry in the Agra district	... 22
1894	Nagpur (18,000 tenants)	... 40
1901	Baroda State	... 40 (of all landowners)
1907	Faridpur (Bengal)	... 55 (of all cultivators)
1919	Mysore State (24,350 co-operators)	... 37

He estimated the total rural debt of British India with its population of 247 millions at more than £ 400,000,000. The sanctity of debt is truly emphasised by the Bengal Provincial Banking Enquiry Committee which states :—

"In Bengal, as in most other parts of India there exists a very strong feeling among all castes, creeds and classes, of the sanctity of debt. A borrower, whether Hindu or Muhammadan, has an inherent repugnance towards repudiation of a debt incurred by him. This feeling may have had its origin in the religious precepts of the respective creeds, or in the social customs prevailing among the people, but it undoubtedly exists, and to its existence must be attributed the fact that so many of the debts are verbal or recorded in a very informal manner and seldom attested by witnesses. A borrower seldom tries to evade repayment of the debt, and will always pay if he can. For these reasons, the village money-lender has seldom to sue his client. The experience of all civil court judges is that in suits for the recovery of debts, the debts are seldom denied. There are no doubt instances to the contrary, but we are of opinion that they are rare. The prevalence of this sentiment is a very important factor in the banking system of the country."

Agriculture is suffering for want of sufficient tillage and manure. Like the ryots, their cattle suffer from poverty, underfeeding, famine and disease, all avoidable to a large extent. According to the Hon. G. K. Parekh, the high assessments for land revenue by the Government have forced the agriculturists to borrow, have made them unable to manure the land properly, and have prevented them from keeping their lands fallow or from having a proper rotation of crops and they have been obliged to utilise all their lands for the crop that pays them best, quite irrespective of the effect in impoverishing the land. Mr. Martin, census commissioner for India, made the following significant statement in 1923 :—"There are many obstacles in the way of improvement in conditions of cultivation : the ignorance, immobility and conservatism of the agricultural population, the system of land tenure with its progressive fragmentation of holdings and the difficulties connected with the introduction of agricultural machinery. Yet industrial development, even if it be possible on a large scale in India, cannot take the place of agriculture. The country must produce food for an increasing population or become dependent on the world's supplies with disastrous consequences. We have had in the last few years the new phenomenon of an import of wheat in India from Australia. India requires much more from outside for her development and she must depend for many years on what she produces from the ground to pay for what she must get from other countries." But we cannot allow agriculture to decay in any way and on the progress in agriculture depends the progress of India in wealth and civilisation. The Government of India has also direct interest in agriculture because "the Government of India is not only a Government but the chief landlord. The land revenue is derived

from that portion of the rent which belongs to the State and not to individual proprietors. Throughout the greater part of India, every measure for the improvement of the land enhances the value of the property of the State. The duties which in England are performed by a good landlord fall in India in a great measure upon the Government. Speaking generally, the only Indian landlord who can command the requisite capital and knowledge is the State."

The Indian Government should expend more for counteracting agricultural backwardness and depression and the following are suggested as remedies:—More scientific research departments and more agricultural colleges for the improvement of the soil and crops and the prevention of pests and diseases, etc.; more veterinary colleges and veterinary surgeons; breeding of cattle and sheep demonstration farms, agricultural school in every village; cultivation of waste lands fit for cultivation; irrigation; co-operative societies; agricultural banks; development of village industries; restrictive legislation regarding money-lenders and alienation of land; building and improvement of village roads for the purpose of transport, etc. The socialists will add to the above list the nationalisation of land and its mineral resources and drastic reduction of military expenditure. The absence of adequate banking facilities in India is a great handicap to agriculture. "With a population of 319 millions, India had only 598 banking offices in 1921 while Canada with a population of 8½ millions had about 41,000 banks and the United Kingdom with a population of 48 millions had 9,138 in 1917. In India 10'2 p. c. of the people live in towns of 5,000 or over inhabitants, and only 207 of these towns in 1921 possessed banks."

Irrigation is absolutely necessary for the growth of agriculture.

**Irrigation.** The normal annual rainfall is defective and there is no way but irrigation for good crops. The importance of irrigation was also emphasised by the Indian Statutory Commission presided over by Sir John Simon in the following lines:—"Except in the north-west the whole of the country is dependent on the monsoon, and all major agricultural operations are fixed and timed by this phenomenon. Unless perennial irrigation is available, climatic conditions thus restrict agricultural operations to a few months of the year. Under the prevailing system of tillage the small holdings do not provide accommodation for more than half of the time of the cultivator."

Irrigation was practised in ancient India but the earliest irrigation works undertaken under the British administration were in the deltas of Madras. The Bari Doab Canal began in 1850; the Sirhind Canal in 1869. The Chenab Canal is the largest of the Indian system. The Jhelum Canal was finished in 1901 and the

Upper Chenab Canal and the Lower Bari Doab Canal were opened in 1913. The triple canal project is to irrigate two million acres. In the United Provinces, there are the Ganges and Lower Ganges Canals ; in Behar, Sone Canal; in Bengal, Midnapur Canal. In Bombay, irrigation works are not remunerative. There are three navigation canals in India, *viz.*, the circular and Eastern canals in Bengal, the Orissa coast canal and the Buckingham canal in Madras. The irrigation works undertaken by the Government are either productive or protective. The productive works are constructed with borrowed funds. The following irrigation projects were under construction at the end of the year 1914:—

Projects arranged by provinces.	Length in Miles	
	Main Canals. Miles.	Distributaries. Miles.
<b>Burma—</b>		
1. Y—eu Canal	53	200
2. Twante Canal	20	...
2(a) Twante Canal dredgers	...	...
<b>Punjab—</b>		
3. Lower Jhelum Canal	238	1,203
4. Upper Jhelum Canal	128	562
5. Upper Chenab Canal	210	1,092
6. Lower Bari Doab Canal	180	1,060
<b>North-West Frontier—</b>		
7. Upper Swat River Canal	143	339
<b>Bombay—</b>		
8. Mahiwal Canal	206	87
<b>Madras—</b>		
9. Nagavalli River Project	23	57 (b)
10. Divi Island Project	50	116
11. Toludur Project	4	32
<b>United Provinces—</b>		
12. Gorai Canal	9	41
<b>Central Provinces—</b>		
13. Asola Mendha Tank	...	75 (b)
14. Waingunga Canal Project	28	152 (b)
15. Mahanadi Canal Project	140 (b)	476 (b)
<b>Total</b>	<b>1,432</b>	<b>5,492</b>

In India, irrigation yields a revenue of  $1\frac{1}{2}$  Crores every year consisting of occupier's rate, owner's rate and enhancement of land revenue due to canals. The landowners derive benefits from irrigation works by increased rentals ; the agriculturists obtain increased production ; large areas in the country are protected from

famines as irrigation works increase the total food-supply of the people ; the Government get increased revenue and contented people. The extent of existing irrigation works should be supplemented by further works ; the water of rivers and streams being diverted from flowing uselessly into the sea, many more canals and storage works are needed ; the agriculturists should be given loans and grants to construct wells and reservoirs. It is true no doubt that "there is no gold mine in the world that can be compared to an irrigation work." Irrigation is a great remedy for famine and the Famine Commissioners in their Report in 1880 rightly said :—"Among the means that may be adopted for giving India direct protection from famine arising from drought, the first place must unquestionably be assigned to works of irrigation. It has been too much the custom, in discussions as to the policy of constructing such works, to measure their value by their financial success, considered only with reference to the net return to Government on the capital invested in them. The true value of irrigation works is to be judged very differently. First, must be reckoned the direct protection afforded by them in years of drought by the saving of human life, by the avoidance of loss of revenue remitted and of the outlay incurred in costly measures of relief. But it is not only in years of drought that they are of value. In seasons of average rainfall they are of great service and a great source of wealth, giving certainty to all agricultural operations, increasing the out-turn per acre of the crops, and enabling more valuable descriptions of crops to be grown. From the Punjab in the north to Tinnevelly, at the southern extremity of the peninsula, wherever irrigation is practised, such results are manifest ; and we may see rice, sugar-cane, or wheat taking the place of millets or barley, and broad stretches of indigo growing at a season when unwatered land must lie absolutely unproductive."

The extreme, abject and awful poverty of the Indian people is working havoc to her children and the number of Famines. famines and the losses of lives therefrom are simply staggering. The official records give us the following informations:-

#### FAMINES.

Periods	Numbers	Deaths (estimated or recorded)
1800 to 1825	5	1,000,000
1826 to 1850	2	500,000
1851 to 1875	6	5,000,000
1876 to 1900	18	26,000,000

Moreover, in days of scarcity, the villagers live in a state of famine and it is scandalous that such a wastage of human lives takes

place for famines, preventible no doubt but considered by the conservative and illiterate Indians a "visitation of the revenge of Nature" over which no human power is supposed to have any control. Such an inert psychology is surely reprehensible. From the above figures it would be evident that famines recur at frequent intervals and the Famine Commissioners of 1880 estimated that on an average there were two bad seasons to seven good ones and one-twelfth of the population might be taken as the portion affected by each famine. The indicators of famines are the failure of rains, failure of crops, rise in prices, unemployment among the labourers, contraction of credit and of private charity, increase of theft and robbery, evidence of general restlessness and deterioration of the health of the people leading to epidemics of serious kind.

The Government do not remain idle in the period of famine. To cope with famines, every provincial government has Famine Code. a famine code prescribing relief measures and other precautionary arrangements. When the signals of approaching famine are discernible, the local Government are recommended to follow the following plan of work :—

- (i) Liberal advances should be given for the construction of temporary, and the repair of permanent, wells, and for other village improvements ;
- (ii) non-official co-operation should be enlisted and the organisation of public charity should be vigorously taken in hand;
- (iii) liberal advances should be given for the purchase of seed for the ensuing crop;
- (iv) the police should be supplied with funds to relieve wanderers in distress ;
- (v) test works should be started, and poor-houses should be opened at the chief centres of population ;
- (vi) inquiries as to suspensions of revenue should be begun ;
- (vii) relief circles should be organised, and the necessary inspections should be made ;
- (viii) preliminary lists should be drawn up of persons eligible for gratuitous relief.
- (ix) if there are threatenings of a scarcity of fodder or drinking water, steps should be taken to meet it and to encourage private enterprise to import fodder and to develop the water-supply.

The relief works consist of public works and village works; public works would be under the control of Public Works Department and village works under the control of the revenue authorities. Famine wage is the lowest amount sufficient to maintain health. Gratuitous relief is to be extended to those persons, having no able-bodied supporters or incapacitated by physical infirmity. Poor-houses should be

started for persons unfit for work. There should be relief arrangements for purdanashin women, respectable men, artisans, weavers, orphans, etc. In the last stage, "takavi" loans should be given for cattle and seed and charitable fund donations distributed. The success of relief measures depends upon the foresight, energy and sympathy of the executive officers of the Government. The Famine Codes are more or less perfect and the officers-in-charge can make the whole relief operations successful or unsuccessful as they mind. From the statistical abstract furnished by the Government of India, it is evident that quite a decent sum was spent for famine relief :—

Famine Relief.

	£		Rupees
1900-01	4,147,177	1911-12	17,14,403
1901-02	884,061	1912-13	28,33,278
1902-03	983,090	1913-14	23,62,671
1903-04	905,680	1914-15	41,98,277
1904-05	1,000,009	1915-16	11,20,420
1905-06	1,000,930	1916-17	28,14,254
1906-07	1,009,743	1917-18	56,476
1907-08	1,296,063	1918-19	46,16,514
1908-09	1,645,179	1219-20	1,17,46,559
1909-10	1,000,000	1920-21	26,64,017
<hr/>		<hr/>	
	<hr/> £ 13,871,902		<hr/> Rs. 3,40,27,069
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Now let us see what are the causes of famines. The direct cause is drought or excessive rainfall which brings about Causes of famines. insufficient production of crops. But crop famine is not so serious in India as money famine. The surplus produce of India taken as a whole still furnishes ample means of meeting the demands of any part in the country and the real trouble is the want of money. In good years, the Indian cultivators cannot think of anything except bare subsistence and in bad years, they fall back on charity or loans which ultimately bring them to the stage of famine. There is not the lack of food but there is the want of resources to buy the food. Therefore the general poverty which is menacing is the main cause of famines. Famines leave very unwholesome effects behind—government resources crippled, people's health shattered and their capacity for work impaired—and it is in the interest of both the ruler and the ruled that efforts should be seriously and earnestly made to prevent famines. Prevention is here the best remedy and the need is to increase the reserve power of people by increasing their material prosperity and money incomes. Famine does not merely mean unemployment among the wage-earners ; it affects millions of men ; it

means starvation, epidemics, miserable plight, and moral and physical degeneration. Science and State efforts have made the recurrence of famines impossible in Modern Europe and it is scandalous that India would continue to be victim of their ravages.

If poverty be the cause of famines and other miseries, let us see what are remedies for it. Several measures have been suggested for combating the poverty evil and the following are among the leading remedies and palliatives :—improvement in the method of agriculture ; extension of cultivated area ; diversification of the occupations of people ; promotion of industries ; development of agricultural and industrial education ; Indianisation of the administration and the army ; reduction of the public expenditure ; moderation in the assessment of land revenue ; properly organised emigration ; decrease of ruinous litigation ; irrigation ; swadeshi ; extension of trade unions ; inauguration of a poor law system, old age pensions, pensions for widows, national health insurance, etc. ; a minimum wage and trade boards ; raising the age of marriage ; restriction of the population by birth control ; regulation of the hours of labour and child-labour ; extension of co-operative credit.

**Co-operative credit** merits our special attention because that is extremely useful in checking indebtedness and promoting thrift among the villagers. Our villagers, as we have seen, are hopelessly bankrupt and indebted. Sir Daniel Hamilton incisively points out :—

“India’s 700,000 villages, with their 250 millions of people, are India’s foundation stones, and most of these are as shaky and unsound as they can be. The rayat is India’s key man, but he is bankrupt ; and it is because the rayat is bankrupt that the provincial purses are bankrupt, and that the masses of the people are bankrupt of nearly all that makes life worth living. What the Viceroy calls “the riddle of India” is an economic riddle, which only the rayat can solve. Only he can open the door to Dominion Status or Independence, but only when he has reached the status of a man. He holds the key but his arm is paralysed by the money lender, and is powerless to turn the key which opens the door to freedom—freedom first of all from the money shackles which bind him soul and body, and freedom thereafter for his country.”

Speaking of the value of the co-operative movement, the Indian Statutory Commission of 1929 state that it is helping India immensely and 90,000 co-operative societies are no doubt insufficient but they are a great asset to the country. The Commissioners say :—

“The work of the co-operative department is concerned not with defects in natural conditions, but with poverty and improvidence. The wide spread of indebtedness of the rural population is one of the

most serious economic problems of India . . . . . The money-lender is not in the least concerned with the purpose of a loan ; his policy is to entangle the debtor to an extent that will leave him with just enough of the product of his labour for the bare subsistence of himself and his family. The misery entailed in such a system is almost equalled by its economic wastefulness.

"The problem of debt is almost wholly the problem of how to maintain the peasant proprietor in freedom and comfort. Its solution is the aim of the Co-operative Department in the various provinces. The economic value of such a movement, in conditions such as we have described above, can hardly be overestimated. But its educative value, not only in thrift and foresight, but above all, in the advantages of common endeavour on a basis that cuts across class and social distinctions, must be almost as great. It is an education in affairs quite as valuable for the exercise of political rights as the education of the schools."

Economic co-operation is that credit, which is denied to individuals, becomes accessible to those joined together. This system underlies the system of co-operative credit and also the foundation of co-operative purchase, sale, production and insurance. In a credit society, persons combine and furnish a collective guarantee by which they are enabled to secure money at a lower rate of interest than they could obtain individually. All that is legally necessary is for ten or more persons to secure registration. But in the co-operative purchase, sale, production and insurance, there is combination to make economies in the preparation and disposal of produce. The origin of co-operative credit as an organised system is very humble; two Germans Raiffeisen and Schulze-Delitzch started co-operative Credit, Raiffeisen for poor peasants and Schulze-Delitzch for artisans. Between 1880 and 1890, the movement established itself.

In India, Co-operative credit societies were started by the Act of 1904, though experiments in that line were made earlier by Sir William Wedderburn, Sir Frederick Nicholson, I. C. S., Mr. Dupernex, I. C. S. and others. The Act of 1901 divided the societies into two classes, rural and urban. Certain duties were prescribed for societies and members. Registrars were appointed in each province; and in two years 800 societies sprung into existence. The number swelled on as years rolled till the Act of 1912 was passed with a view to remedy certain defects of the first Act. In the year 1914, the number of societies (including those in Mysore and Baroda) rose to 12,324 with a membership of 573,536. Since then societies are on the increase.

The principal object of the formation of society is to obtain money or the other necessities of production at cheaper rates, or to

sell their produce at higher prices than those which prevail in the market to which they would individually resort. Thus the economic benefits are many. In India, the agriculturists are enjoying freedom from debt and accessibility to capital on reasonable terms and thus they would work with better heart and increased resources and the improvement in their economic position must result in their purchasing power and in the expansion of external and internal trade. Co-operation is thus a great agent in effecting improvement in agriculture. Co-operation has also a great educational value.

When men are associated for business purposes, they feel the need of education. There are tangible reasons for learning to keep accounts, to sign pro-notes, to read pass books and receipts, and knowledge of this kind must lessen the chances of fraud while members who are able to read simple co-operative literature will take a more intelligent interest in their society and in the progress of the movement. Illiteracy is a hindrance to the movement, and just as co-operation leads to a demand for literacy, so literacy encourages the demand for co-operation. The effect of co-operation, however, extends beyond this. It does more than merely provide cheap credit; it encourages thrift. The criterion for admission to a society is a man's character and not his wealth, and men, when brought together for their common weal and when pledging their common credit, have influenced each other's conduct and advanced each other's interest in ways previously undreamt of in this country. The fact that the members are ultimately responsible for the payment of the debts of each and every member, operates as a powerful check on expenditure on unproductive purposes greater than that absolutely required by public opinion, and marriage expenses have accordingly been curtailed. Drunkards and gamblers have been reformed or excluded from societies. Self-restraint, punctuality, straightforwardness, self-respect, discipline, contentment and thrift have been encouraged. In some areas litigation has markedly decreased. In others the common funds have been used to start schools, to provide scholarships, to distribute quinine, to provide drinking wells, to clean streets. The impetus of co-operative credit has led on to savings banks, benefit funds and provision for the poor.

The Government of India by providing co-operative credit have obviated the difficulty of obtaining capital for peasant agriculture and for small industrial enterprises. Thus the greatest obstacle to economic progress has been removed. The Indian Act of 1904 was admittedly intended to encourage small and simple credit societies for small and simple folk with simple needs and these still constitute the vast majority of the societies which have since been instituted. This co-operative movement has affected the class of money-lenders doing

avaricious business and exploiting the agriculturists by charging exorbitant rates of interest. Though that class has not died out, those people are becoming reasonable through the influence of the movement. The object of co-operation is to obtain reasonable credit from reasonable creditors. As a rule, the members of the society shall be residents of the same village. The liability of the members of an agricultural credit society in India must by law be unlimited. Among the non-agricultural societies where limited liability is permitted by law, about half the number are on an unlimited basis. There is both official and non-official assistance in India to the co-operative movement. The duties of control and audit are left in the hands of the Government. But the movement does not suffer from strict officialisation as non-official agency is utilised to the utmost.

It is for Local Governments to consider to what extent and in what manner use can be made of societies in each province in district administration—how far they can afford a means of ascertaining the real public-feeling of the district, how far they can by rendering voluntary aid assist in promoting primary education, rural sanitation and medical relief—in what manner they can be used in times of scarcity and famine or during the prevalence of epidemics, or whether the training afforded by them will lead to the development of a true system of village government.

The progress in India of the co-operative movement is indeed startling. To quote Mr. Wolff, "in India the magic touch of co-operative movement almost at once conjured up success. It was a second "veni, vidi, vici." In the year 1919-20, there were 40,772 co-operative societies in all India with 1,521,148 members and a working capital of Rs. 21,40,71,000. In the year 1922, the number of societies in British India alone will be about 50,000 of which 90% are primary agricultural societies, 7% non-agricultural and 3% are Central Banks unions and other secondary institutions. The Indian Statutory Commission speak of 90,000 societies. A brief summary of the working of co-operation in India is contained in the Government of India resolution of 1914 :—

The remarkable progress which has been made during the first ten years could not have been foreseen by the most sanguine believer in co-operation. From small beginnings the movement, fostered by the resourceful guidance of Registrars and assisted by a body of non-official workers, has grown rapidly until it now represents an influence vitally affecting a large section of the people. The development which has taken place is all the more striking when it is remembered that excessive State aid has been avoided, and that the aim kept steadily in view has been, not the rapid multiplication of societies, but the restriction of the movement within safe bounds. The policy

of restricting State aid within narrow limits has been fully vindicated and has led to an increase of self-reliance and independence, while the caution with which government has stimulated development has resulted in a natural and healthy growth. The future is full of promise, and although under the influence of federation, and with increased unofficial aid and supervision more rapid progress may be expected, the caution and restraint shown in the past should continue.

Co-operation has brought with it a wide circle of benefits, both moral and material, and these benefits are intended primarily and mainly, but by no means exclusively, for the poorer agricultural classes. They are not, however, confined to societies of any particular type, and a marked feature of the Indian system is its elasticity. So long as the members of the rural society are in touch with one another and have a unity of interest, so long as the principle of unlimited liability is maintained as a leading feature, and so long as precautions are taken to prevent undue importance being attached to the profits of members, there is no necessity to adhere slavishly to any particular type. In the detailed administration of credit societies, there are certain maxims which, subject to the reservations specified in this Resolution, may be said to represent the teachings of our experience and some of these are :—

- (a) that mortgage as a security for debt, though ordinarily discouraged, is not without its use in certain cases ;
- (b) that the early clearance of a member from previous debts after his admission to a society is desirable ;
- (c) that it is unnecessary to confine the grant of loans to those required for productive purposes ;
- (d) that while it is desirable that Government should remove certain technical obstacles in the way of co-operation, it would be unwise to grant exceptional concessions as this would remove from the societies the incentive to self-help ;
- (e) that while it is impossible to lay down any general rule regarding the comparative importance of the different sources from which the funds of societies are derived, it is essential that the bulk of these funds should be in a form easily realisable ;
- (f) that the greatest importance should be attached to the punctual repayments of loans ; and
- (g) that while there may be advantages in the earlier stages in using the reserve as part of the working capital of the society, it should gradually, as it becomes more important, be set apart for separate investment.

As societies increase, it has been found necessary to federate them under central banks or corresponding organisations. In some provinces these have again been brought under a Provincial Bank,

and the establishment of such banks in all the major provinces is probably only a matter of time. These central institutions bring individual societies into touch with the general money market and serve as distributing centres for their balances. Their management presents special difficulties, and, if co-operation is to be secured against catastrophe, this portion of the organization will require particular attention. It is necessary for similar reasons to insist on adequate inspection and audit of individual societies, and Government while anxious to secure as much autonomy as possible for the movement, cannot dissociate itself from the task of securing at all times, both on financial and on social grounds, an efficient degree of supervision. Finally, although district officers need not concern themselves with the details of initiation and inspection they must recognise that a new factor in district administration has come into being, that new duties and new responsibilities have been thrown upon them, and that the movement, if wisely directed, may form yet another link which binds together Government and the people.

The economic conditions in the towns are no better than those in the villages. The following statistics will speak for Bad conditions in towns. themselves :—

Cotton Wages in the Mills in May, 1921.  
(Average earnings per day)

Centre	Men.	Women.	Big lads and Children.	All Work- people.
	*Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Bombay	1 5 6	0 10 9	0 11 1	1 2 10
Ahmedabad	1 5 0	0 12 1	0 11 4	1 2 7
Sholapur	0 15 11	0 6 9	0 9 1	0 12 8
Other centres	1 1 8	0 10 1	0 8 11	0 15 6

\* rupee = 1s. 6d.; 16 annas = 1 rupee; 1 anna = 12 pies.

This averages out at less than 2s. a day of eleven hours for men, 1s. per day for women, and from 4d. to 6d. for children working half-time. Fines for being late, for absence, or for inferior work still further reduce these low wages, and the common practice of deferring payment for a month lands the poor worker in the ditch of debt, out of which many never climb, having to scale heights of interest varying from 75 to 300 per cent.

In 1921 the relative position between Great Britain and India was—

		INDIA	UNITED KINGDOM.
Looms	...	123,783	790,399
Spindles	...	6,870,804	60,053,246

All told, there are 280 cotton mills in India, producing annually about 700,000,000 lbs. of yarn and 400,000,000 lbs. of woven goods. Exports of cotton manufactures, chiefly to China, Egypt, Persia, Asiatic Turkey, Arabia, East Africa, and the Straits Settlements, averaged annually in rupees—

1909 to 1914.	1914 to 1919.	1920.	1921.
20,895,000 ...	43,043,000 ...	87,362,000 ...	75,063,000

The paid up capital in the mills in 1920 was estimated at £258,888, or 271,000,000 rupees, the debenture capital amounting to £99,000 or 34,229,472 rupees. According to the estimate of the Chairman of the Mill-owners' Association the gross profits of the Bombay mills in 1920–21 amounted to 16 crores of rupees, or £16,000,000 sterling, the dividends of thirty-five leading mills averaging 59 per cent.

Labour's share in jute industry may be estimated from the weekly wages paid to the workers, amounting to 3s. for carders, 3s. 6d. for rowers, 4s. 9d. for spinners, 7s. for hemmers and sewers, 9s. for weavers and 12s. for tenters.

Wages on the tea, rubber, coffee, cotton, oil, pepper, etc., plantations average 3s. to 4s. a man, 1s. 6d. to 3s. for a woman. On the tea plantations of Assam a man gets 8d. for eight hours a day, a woman 6d., and a child 3d.; in the tea factories the worker earns 9d. for an eight-hour working day.

The following figures taken from the report of the Chief Inspector of Mines will show :—

	Hours.	Weekly Wages.
Miners.....	40	Rs. 4'12=7s.
Underground males (other than miners)	52	„ 3'12=5s.
Underground females .....	48	„ 2'8 =3s. 9d.
Surface males .....	60	„ 3.15=5s. 11d.
Surface females.....	60	„ 2'7 =3s. 8d.

In 1922 disputes often recurred over demands for higher wages. The number of persons working in the mines regulated by the Indian Mines Act was 229,511, of whom 142,103 were men, 78,806 women and 8,602 children under twelve. Prohibition of employment of children under thirteen years of age underground came into force in 1924, but 60,000 women still go down into the bowels of the earth to struggle in dust and dirt and damp for a bare existence.

To obviate these low economic conditions, trade union of wage-earners is a necessity. The Trade Union Act of 1926 legalises trade union in India. There is the necessity.

All India Trade Union Congress, the aims of which embrace :—(1) eight hours a day in factories and mines ; (2) free and

compulsory primary and technical education; (3) equality in Civil Service regulations, which at present favour "whites"; (4) abolition by law of the system of fines prevailing in industrial and commercial firms, railways, etc.; (5) establishment of labour bureaus; (6) national insurance against sickness, unemployment, and old age; (7) prohibition of employment of women underground in mines; (8) more women factory inspectors; (9) provision of creches and day-nurseries in the vicinity of factories; (10) maternity benefits; (11) minimum wage; (12) improvement of the Workmen's Compensation Act; (13) a Trade Union Act on the lines of the British Act; (14) arbitration and conciliation legislation; (15) Labour representation in the central and provincial legislatures; (16) a Labour party for India; (17) the removal of untouchability; (18) adult suffrage; (19) self-government for India and Indianisation of the public services; (20) affiliation and co-operation with the International Labour Movement, etc.

The All India Trade Union Congress in 1926 contained fifty-two affiliated unions, with a total membership of over 125,000.

### THE WHITLEY REPORT

For further edification of the students as to the real conditions of labour in India, I would give here a running analysis of the report of the Royal Commission on Labour in India, presided over by Mr. John Henry Whitley. The report was published in July, 1931, and the total cost of the Commission is estimated at Rs. 10,50,000 (about £78,750). It is an authoritative document on the conditions of Labour in India and the latest in the field. India can boast of 2,451 factories, of which 295 are in cotton spinning and weaving, 95 in jute spinning and weaving, 68 in other textiles, 458 in textiles, 871 in Engineering and Metal works and 122 in non-textiles. The average daily number employed is 338,000 in cotton factories, 347,000 in jute factories, 11,000 in other textiles, 696,000 in textiles, 315,000 in Engineering and metal factories and 155,000 in non-textiles factories. The above are the figures for perennial factories and there is a fair number of seasonal factories.

The factory worker is not an agriculturist, nor is the factory population divorced from the land, as in the West. The factory workers generally possess village upbringing, village traditions and retain contact with the villages. Labour often migrates tearing away village connection for economic poverty, social disability, and feudal bondage, coupled with the human instinct of escaping from the village surroundings and of amassing wealth. The working conditions in factories are far from satisfactory. Arrangements for the elimination of dust and dirt are defective. Under the Factories Act, latrine accommodation is compulsory but must be kept in a state of cleanliness,

Humidification in cotton mills is necessary, especially in hot season. Actual increase in accidents is recorded. Factory buildings must be sound. The average daily earnings of cotton mill operatives are Rs. 1-8-0 in Bombay, Rs. 1-6-8 in Ahmedabad and Rs. 1-0-5 in Sholapur. For women, the respective figures are Re. 0-11-11, Re. 0-12-6 and Re. 0-6-8. There are seasonal factories—factories open for a part of the year only. The total number of seasonal factories in India is 7,153 and in Burma 976; the number of operatives in India is 1,455,092 and in Burma 98,077. The number of unregulated factories is not less. In British India, there are 548 coal mines, 125 Manganese Ore mines, 489 Mica mines, and 332 other mines. In all the mines, which come up to 1,503, there are 250,272 employees, of whom 110,111 belong to the underground.

The following figures extracted from the annual reports of the Railway Board show the increases since 1914 in route mileage, in traffic expressed in terms of passenger and ton miles on the twelve class I Railways :—

	1913-14	1928-29
Route Mileage	... 30,533	34,689
Passenger miles (in millions)	... 15,707	20,705
Ton miles (in millions)	... 15,213	21,209

The total number of Railway employees is 819,058 (including State and non-State railways).

The efficiency of the Indian industrial worker is low. The causes of the low efficiency are to be found in the climate, low standard of living, lack of physical energy and mental vigour cutting at the root of ambition, and in poverty "which leads to bad conditions, bad conditions to inefficiency and inefficiency to poverty". There must be attempts to enhance efficiency, to heighten earnings and to improve the conditions of life.

Indebtedness among the workers is appalling. More than 80 p.c. of the loans are obtained from the money-lenders whose usual rate of interest is extremely exorbitant. The money-lenders do not press for payment of the principal but for the interest. The tyranny of debt degrades the worker and impairs his efficiency.

The importance of health is great. The industrial workers suffer from lack of family life. The workers leave their wives at home and it works up a great strain on their sex-lives and the result is an increase of prostitution and consumption of liquor and intoxicating drugs in the industrial areas. Physique is the most unsatisfactory among the Cotton mill workers.

Housing in industrial areas is extremely unsatisfactory. Congestion and overcrowding intensify as years go by to the utter neglect of sanitation, "evidenced by heaps of rotting garbage and pools of

sewage". There are many houses without plinths, windows, ventilation, consisting of a single room, the only opening being a doorway often too low to enter without stooping. In such houses, human beings are born, sleep and eat, live and die. The "bustees" of Bengal are proverbially nauseating.

To improve the health and welfare of industrial workers, there should have an Institute of Nutrition; sanitary markets in all urban and industrial areas; adulteration of foods Acts should be in force in all provinces; more attention to industrial hygiene and industrial disease; women to be appointed among public health staffs; health propaganda by the Government and local authorities; comprehensive public Health Acts in all provinces; maternity benefit legislation to be enacted throughout India.

To improve the housing of the industrial worker, there should be bathing and washing places near each block and latrines of the septic-tank type; more attention to housing, water-supply, drainage, etc.; there should be minimum standards in regard to floor and cubic space, ventilation and lighting; Town-planning Acts are required; the provision of working class housing should be a statutory obligation on every Improvement Trust.

To bring labour in touch with the administration of the country, the report recommends that if special constituencies are to remain a feature of the Indian constitution, labour should be given adequate representation in the Central and Provincial legislatures.

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